Supplement 1. Authorship and collaborators

PREDICT Study Management Group

Chief Investigator: James Kinross^{1,2}.

Study Lead: Sheraz Markar, 1,2.

Jasmine Winter Beatty, MRCS^{1,2}, Jonathan M Clarke, PhD³, Viknesh Sounderajah, MRCS^{1,2,4}, Amish Acharya, MRCS^{1,2,4}, Simon Rabinowicz, MBBS^{1,5}, Guy Martin, PhD^{1,2}, Leigh R Warren, MBBS^{1,4}, Seema Yalamanchili, MRCS^{1,2,4}, Alasdair J Scott, PhD^{1,2,4}, Elizabeth Burgnon, MSc¹, Sanjay Purkayastha, MD^{1,2}, Sheraz Markar, PhD^{1,2}, James M Kinross, PhD^{1,2}, on behalf of the PANSURG-PREDICT Collaborative.

Endocrine subcommittee chair: Aimee di Marco^{1,2}.

Orthopaedic subcommittee (COVERT) co-chairs: Kapil Sugand², Khaled M Sarraf², Mr Chang Park².

Statisticians: Jonathan M Clarke³ and Simon Rabinovicz^{1,5}.

Affiliations

- 1. Department of Surgery & Cancer, Imperial College London, London, United Kingdom.
- 2. Imperial College Healthcare NHS Trust, London, United Kingdom.
- 3. Centre for Mathematics of Precision Healthcare, Imperial College London, United Kingdom.
- 4. Institute of Global Health Innovation, Imperial College London, London, United Kingdom.
- 5. Department of General Medicine, Royal Free NHS Foundation Trust, London, United Kingdom.
- 6. Department of Surgery, Royal Adelaide Hospital, Adelaide, Australia.

Acknowledgements

Funding and infrastructural support for this research was provided by the National Institute for Health Research Imperial Biomedical Research Centre (BRC).

We are grateful to the Imperial College London Institute of Global Health Innovation, Communications team: Nikita Rathod and Justine Alford. We also acknowledge the Research teams from Charing Cross Hospital and St Mary's Hospital for their support.

Finally, the realisation of this project would not have been possible without the hard work of all our collaborators, listed below, to whom we are most indebted.

PANSURG-PREDICT Collaborators

All collaborators are Pub-Med citable.

PanSurg Collaborative:

Ayush Kulshreshtha, Rabiya Aseem, Emily K Deurloo, Nicola C Quinnen, Nina JM DeLa Cruz, Andrew J Yiu, Natasha Khan, Ola Markiewicz, Ee Teng Goh, Max Denning, Ravi Aggarwal, Sam Mason, Swathikan Chidambaram, Simon Erridge, Simon D Dryden, , Ovidiu Serban, Uddhav Vaghela.

PanSurg-PREDICT Local Collaborators:

Local Principal Investigators are underlined.

Australia

Robert Mechera, <u>Anthony Glover</u> (Department of Endocrine Surgery, Hornsby Ku-Ring-Gai Hospital, Hornsby); Alex Papachristos, Rachel Xuan, <u>Anthony Glover</u> (Department of Endocrine Surgery, Royal North Shore Hospital, St Leonards); Deepali Poels, Kevin Tree, Matt S Daniel, <u>Anthony Glover</u> (Department of General Surgery, Royal North Shore Hospital, St Leonards).

Bangladesh

Sabbir Karim, Nazmul Islam, <u>Ashrarur Rahman Mitul</u> (Division of Paediatric Surgery, Dhaka Shishu Children Hospital, Dhaka).

Belgium

Bert Dhondt (Department of Surgery, AZ Rivierenland Hospital, Bornem).

Egypt

Mohammed A Azab, <u>Ahmed Y Azzam</u> (Department of Surgery, Damietta Specialized Hospital, Damietta, Egypt).

Greece

Dimitris Balalis, Evangelos Fradelos, <u>Dimitris P Korkolis</u> (Department of Surgery, Saint Savvas Cancer Hospital, Athens); Antonia Skotsimara, Efstratia Baili, Eleandros Kyros, Evangelos Felekouras, Ilias Vagios, Lyssandros Karydakis, Maria Mpoura, Athanasios Syllaios, Spyridon Davakis, Theodore Liakakos, <u>Alexandros Charalabopoulos</u> (First Department of Surgery, Laiko General Hospital, National and Kapodistrian University of

Athens, Athens); Nikolaos Tasis, <u>Dimitrios Manatakis</u> (Second Department of Surgery, Athens Naval and Veterans Hospital, Athens).

Hungary

Andras Fulop, Attila Szijarto (First Department of Surgery, Semmelweis University, Budapest).

India

Mudassir A Khan (Department of Surgery, Government Medical College, Rajouri), Arshad Baba, Saima Nanda (Department of Surgery, JK Health services, Kashmir), Javeid A Bhat, Fazl Q Parray, Gowhar Aziz, Nisar A Chowdri, Rauf A Wani, Zameer A Shah, Syed Muzamil Andrabi, <u>Asif Mehraj</u> (Department of General Surgery, Sher I Kashmir Institute of Medical Sciences, Srinagar).

Ireland

Amy L Fowler, Ali Chaudhary, Ben Murphy, Dayna van der Hoef, Eanna Ryan, Ellen O'Beirn, Fadi Marzouk, Kevin McKevitt, Kulsoom Nizami, Harleen Grewal, Orla Hennessy, Yasmine Roden, Sami A Elwahab, Christopher Collins (Department of General Surgery, University Hospital Galway, Galway); Ahmed Hassanin, Stewart R Walsh, Adeel S Zafar, Thomas M Aherne (Department of Vascular Surgery, University Hospital Galway, Galway); Michael Devine, Conor Toale, Deirdre M Nally, Waqas Ahmed, Enda Hannan, Fahad Ullah, Mark Twyford, Niamh Foley, Oisin O'Donnell, Colin Peirce (Department of General Surgery, University Hospital Limerick, Limerick).

Italy

Anna Da Roit, Flavio Milana, Salvatore Marano, Silvia Basato, <u>Carlo Castoro</u> (Department of Upper Gastrointestinal Surgery, Humanitas Clinical and Research Center IRCCS, Humanitas University, Milano); Marta Fazzin, Marco Torchiaro, Nicolo' Fabbri, <u>Carlo V Feo</u> (Department of General Surgery, Azienda Unità Sanitaria Locale Ferrara – Università di Ferrara, Ferrara).

The Netherlands

Elise M Meima-van Praag, Maite MT van Haeren, Sarah Sharabiany, <u>Roel Hompes</u> (Department of Colorectal Surgery, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam); Ewout W Ingwersen, Floor Meijer (Department of Surgery, Amsterdam UMC, Vrije Universiteit, Cancer Center Amsterdam, Amsterdam), Daan M Voeten, Suzanne S Gisbertz, <u>Mark I Van Berge Henegouwen</u> (Department of Upper Gastrointestinal Surgery, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam).

New Zealand

Daniel Lee, Blair J Mason, Susan N Stott, <u>Rebecca E Beamish</u> (Department of Paediatric Orthopaedic surgery, Starship Child Health, Auckland).

Nigeria

Akinola Akinmade, Samuel Fayose, Kolawole Alabi, Samuel Larri, Elizabeth Enoch, Victor Kayode-Nissi, Abiodun Okunlola, <u>Ademola Adeyeye</u> (Department of General Surgery, Afe Babalola University Multisystem Hospital (ABUAD), Ado-Ekiti); Adebowale Yusuf, Asimiyu Shittu, Solomon Nwara Irmiya, <u>Ademola Adeyeye</u> (Department of General Surgery, University of Ilorin Teaching Hospital, Ilorin).

Pakistan

Jan Abdullah, Alam Qaiser, Muhammad Bilal, Ali Durrani Noman, <u>Syed I Bukhari</u> (Department of Trauma and Orthopaedics, Lady Reading Hospital, Peshawar).

Romania

Cezar Ciubotaru, Valentina M Negoita (Department of General Surgery, Emergency Clinic Hospital of Bucharest, Bucharest), Bogdan Stoica, <u>Ionut Negoi</u> (Carol Davila University of Medicine and Pharmacy, Bucharest, Department of General Surgery, Emergency Clinic Hospital of Bucharest, Bucharest)).

Saudi Arabia

Souad Ayed, Hajer Alwade, Messedah Aldaya, Nasir A Magboul, <u>Alshahrani Mushabab Ali</u> (Department of General Surgery, Aseer Central Hospital, Abha City).

Spain

Lidia Betoret, Melody Baeza, <u>Jose Aguilar</u> (Department of General Surgery, Hospital General Universitario Morales Meseguer, Murcia).

Sudan

Hytham KS Hamid, Mohamed Eltayeb, Mohamed E Awadelkarim, <u>Hassan Elbahari</u> (Department of Trauma and Orthopaedic Surgery, Ibrahim Malik Teaching Hospital, Khartoum).

Turkey

Ali Yalcinkaya, Can Sahin, Mesut Yavas, Aydin Yavuz, Huseyin Gobut, Hasan Bostanci, Mustafa Sare, Osman Yuksel, Ramazan Kozan, Saygin Altiner, Sezai Leventoglu (Department of Surgery, Gazi University Faculty of Medicine, Ankara); Yasin Kara (Department of General surgery, Kanuni Sultan Süleyman Training and Research Hospital, Istanbul); Engin Aybar, Ahmet Can Sari, Elif Colak (Department of General Surgery, Samsun Training and Research Hospital, Samsun).

United Kingdom

Amer Harky, Abinash Panda, Florentina Popescu, Muhammad Abdulhakeem, Syed Al Nahian, Bilal H Kirmani (Department of Cardiac Surgery, Liverpool Heart and Chest Hospital, Liverpool); Balaji Mahendran, James Goodworth, Shreya Saxena, James Clark (Department of Emergency and General Surgery, Royal Cornwall Hospitals NHS Trust, Truro); Adam Truelove, Marta Penna, Nikhil Patel, Spyros Marinos-Kouris (Department of Emergency Surgery, Stoke Mandeville Hospital, Buckinghamshire Healthcare NHS Trust, Aylesbury); Mechteld C De Jong, Radu Mihai, Shahab Khan (Department of Endocrine Surgery, Churchill Hospital, Oxford University Hospitals NHS Foundation Trust, Oxford); Klaas Van Den Heede, Nikita Chander, Fausto Palazzo, Neil Tolley, Aimee Di Marco (Department of Endocrine Surgery, Hammersmith Hospital, Imperial College Healthcare NHS Trust, London); Matthew Doe, Alexander Ridgway, Alexis Sudlow, Anive Grewal, Enna Lisa Finch, Henry J Richardson Banks, Marcus Quinn, Oliver Brewster, Sarah Dyer, Shuk Yee Choo, Tariq El Jichi El Mutasem, Nick Browning, Dimitri J Pournaras (Department of Gastrointestinal surgery, Southmead Hospital, North Bristol NHS Trust, Bristol); Jacie Law, Angelos Papakonstantinou, Natali Vigneswaran, Stella Nikolaou, Sudhakar Mangam (Department of General and Colorectal Surgery, QEQM Margate, East Kent Hospitals University NHS Foundation Trust, Margate); Moniek HP Verstegen, Samantha Greenfield, Ahmed Ezzat (Department of General Surgery, Charing Cross Hospital, Imperial College Healthcare NHS Trust, London); Andrew Day, Jennifer Ma, Kirstin Carswell, Rachael Hall, Sarah Maher, Sarah Small, Ajay Belgaumkar (Department of General Surgery, East Surrey Hospital, Surrey and Sussex Healthcare NHS Trust, London); Kristie Parkins, Naomi Spencer, Richard J Egan (Department of General Surgery, Morriston/Singleton Hospital Swansea Bay, Swansea Bay University Health Board NHS Wales, Swansea); Arjun Gowda, Francesca L Malcolm, Imran Bhatti, Mohammed Maqsood, Prita Daliya, Shanice Richardson, Stefan Klimach, Stephanie Pike, Zoe Chia, Brijesh Madhok (Department of General Surgery, Royal Derby Hospital, University Hospitals Of Derby And Burton, Derby); Amjad Khalil, Reza Mirnezami (Department of General Surgery, Royal Free Hospital, Royal Free London NHS Foundation Trust, London); Katherine J Williams, Harriet A Owen (Department of General Surgery, St George's Hospital, St George's University Hospital NHS Foundation Trust, London); Neil Donald, Mahfooz Buksh, Kumaran Ratnasingham, Shashi Irukulla, Lavanya Varatharajan, Prateesh Trivedi (Department of General Surgery, St Peter's Hospital, Ashford and St Peter's Hospitals NHS Foundation Trust, Chertsey); Phil Pearce, Osama Moussa (Department of General Surgery, University College Hospital, University College London Hospitals NHS Foundation Trust, London); Chanpreet Arhi, Chrysanthi Karagianni, Cynthia M Borg (Department of General Surgery, University Hospital Lewisham, Lewisham and Greenwich NHS Trust, London); Lyndcie Lee, Marios Erotocritou, Simon J Mccluney, Sunreet MK Randhawa, Chetan Parmar (Department of General Surgery, Whittington Hospital, Whittington Health NHS Trust, London); Harriet Selaru, Hussam S Khougali, Jason Suresh, Katarzyna Nowak, Michael Conroy, Michael Elliott, Natalie

Ocana, Nada Ayoub, Shaun Kabani, Yegor Tryliskyy, Gianluca Colucci (Department of General surgery, Worthing Hospital, Western Sussex Hospitals NHS Foundation Trusts, Worthing); Siobhan Rooney, Malith Nandasena, Anita Balakrishnan (Department of Hepatopancreaticobiliary Surgery, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge); Lois Riley, Poyyamozhi Rajagopal, Sahar Hamrang-Yousefi, Yianna Perikleous, Zaynab AR Jawad, Madhava Pai, Duncan Spalding, Matyas Fehervari (Department of Hepatopancreaticobiliary Surgery, Hammersmith Hospital, Imperial College Healthcare NHS Trusts, London); Ali Hani, Zainul Datoo, Esther V Wright, Hussein Selmi, Joseph Furey, Luke Ginnelly, Naresh Somashekar, Razia Kalifa, Sam Nahas, Nikhil Ponugoti (Department of Orthopaedic Surgery, Hillingdon hospital, Hillingdon Hospitals NHS Foundation Trust, London); Avinash Aujayeb (Department of Pleural and peritoneal Surgery, Northumbria Specialist Emergency Care Hospital, Northumbria Healthcare NHS Foundation Trust, Newcastle upon Tyne); Ali Murtada, Aswathy Pavithran, Estelle Martin, Rajat Raghunath, Tan Arulampalam (Department of Surgery, Colchester General Hospital, East Suffolk and North Essex NHS Foundation Trust, Colchester); Adebimpe Aladeojebi, Behrad Barmayehvar, Isaac Kobe, Nandu Nair, Sriram Rajagopalan, Uzma Sadia, Vinodh Murali, Kalyan Gudaru, Anthony Jaipersad (Department of Surgery, Royal Stoke University Hospital, University Hospitals of North Midlands NHS Trusts, Stoke-on-Trent); Karishma Chandarana, Kudzayi Kutywayo, Edward Caruana (Department of Thoracic Surgery, Glenfield General hospital, University Hospital of Leicester NHS Trust, Leicester); Arash Aframian, Catrin Morgan, David Flaherty, Edward Bray, Kashed Rahman, Nadia Pakroo, Nina JM Dela Cruz, Noel Lee, Rupert Wharton, Sameera Tanna, Rupen Dattani (Department of Trauma and Orthopaedic Surgery, Chelsea and Westminster Hospital NHS Foundation Trust, London); Rakan Kabariti, Tahir Khaleeq, Jae Rhee (Department of Trauma and Orthopaedic Surgery, Princess Royal Hospital, Shrewsbury and Telford NHS Trust, Telford); Andreas Hinsche, Michael Zhang, Emily Rowlands, Nicholas Smith, Callum Smith, Adham Mousa (Department of Trauma and Orthopaedic Surgery, Queen Elizabeth Hospital, Gateshead Health NHS Foundation Trust, Gateshead); Benjamin Lin, Stefanos Koutsouris, Yi Chuen Tan, George Lee, Oliver Clough, Vladislav Kutuzov, Douglas Evans, Andrew Davies, Chang Park, Kapil Sugand, Khaled M Sarraf (Department of Trauma and Orthopaedic Surgery, St Mary's Hospital, Imperial College Healthcare NHS Trusts, London); Lila Krishna, Dele Ogundere, Nicholas Judkins, Catherine Malik (Department of Trauma and Orthopaedic Surgery, Whipps Cross Hospital, Barts Health NHS Trust, London).

PanSurg-Predict Database Site Registration Form Dear Colleagues,

As part of the response to COVID-19, we are collecting data on the impact of COVID-19 on surgical services worldwide.

As you are aware, our ability to deliver healthcare services will be changing rapidly in the immediate future and this will strongly affect patient morbidity and mortality.

Understanding the impact on each unit will be essential to help us model the true effects of COVID-19 on the surgical population and plan appropriate response strategies.

Thank you very much once again for agreeing to participate and your support, your help is invaluable.

Stay safe.

The PanSurg collaborative

Please complete as much information as you can below. Exact information would be preferable but if you do not have it at present, please insert an estimated number. We will send you an email to confirm the information in 3 days time so you may update your site registration with the correct numbers then.



11-01-2021 11:39 projectredcap.org

Select your country		UK	
		Afghanistan	
		Albania Algeria	
		Andorra	
		Angola	
	\bigcirc	Antigua and Bar	buda
		Argentina	
		Armenia	
		Australia Austria	
		Azerbaijan	
		Bahamas	
		Bahrain	
	Ō	Bangladesh	
	\odot	Barbados	
		Belarus Belgium	
	\sim	Belize	
	$\tilde{\circ}$	Benin	
	Ō	Bhutan	
		Bolivia	
		Bosnia and Herz	zegovina
	\otimes	Botswana Brazil	
		Brunei	
		Bulgaria	
		Burkina Faso	
	Ō	Burundi	
		Cabo Verde	
		Cambodia	
		Cameroon Canada	
		Central African	Republic
		Chad	перавне
	O	Chile	
		China	
		Colombia	
	_	Comoros	
		Congo Costa Rica	
		Croatia	
		Cuba	
	O	Cyprus	
	Ó	Czech Republic	(Czechia)
		Côte d'Ivoire Denmark	
		Djibouti	
		Dominica	
		Dominican Repu	ublic
		DR Congo	
		Ecuador	
	\odot	Egypt El Salvador	
		Equatorial Guine	22
	\sim	Eritrea	cu
		Estonia	
		Eswatini	
		Ethiopia	
	\bigcirc	Fiji Finland	
	\mathcal{L}	Finland France	
		Gabon	
		Gambia	
	Ŏ	Georgia	
		Germany	
		Ghana	
		Greece Grenada	
11-01-2021 11:39	\cup	Orchiada	projectredcap.o



Q	Guatemala
Q	Guinea
Ŏ	Guinea-Bissau
Ŏ	Guyana
Ŏ	Haiti
Ŏ	Holy See
Ŏ	Honduras
	Hungary
	Iceland
\circ	India
\circ	Indonesia
\circ	Iran
\circ	Iraq
\circ	Ireland
\circ	Israel
\circ	Italy
\circ	Jamaica
\circ	Japan
\circ	Jordan
\circ	Kazakhstan
\circ	Kenya
\circ	Kiribati
\circ	Kuwait
\circ	Kyrgyzstan
\circ	Laos
\circ	Latvia
\circ	Lebanon
	Lesotho
Ó	Liberia
Ō	Libya
\circ	Liechtenstein
\circ	Lithuania
\circ	Luxembourg
\circ	Madagascar
\circ	Malawi
\bigcirc	Malaysia
\bigcirc	Maldives
\circ	Mali
\circ	Malta
\bigcirc	Marshall Islands
\circ	Mauritania
\circ	Mauritius
\circ	Mexico
\circ	Micronesia
\circ	Moldova
Ō	Monaco
\circ	Mongolia
0	Montenegro
Ŏ	Morocco
Ō	Mozambique
\circ	Myanmar
\circ	Namibia
\circ	Nauru
\circ	Nepal
\circ	Netherlands
\circ	New Zealand
Ó	Nicaragua
\circ	Niger
\circ	Nigeria
\circ	North Korea
Ó	North Macedonia
Ō	Norway
Ō	Oman
Ō	Pakistan
Ŏ	Palau
Ŏ	Panama
Ŏ	Papua New Guinea
Ŏ	Paraguay
Ŏ	Peru
Ŏ	Philippines
Ŏ	Poland

○ Portugal
○ Qatar
Romania
O Russia
Rwanda
Russia Rwanda Saint Kitts & Nevis Saint Lucia
Saint Lucia
Samoa
San MarinoSao Tome & Principe
Saudi Arabia
○ Senegal
○ Serbia
Seychelles
○ Sierra Leone
Singapore
○ Slovakia
Slovenia
Solomon Islands
Somalia
South Africa
South Korea
South Sudan
Spain
 Spain Sri Lanka St. Vincent & Grenadines State of Palestine Sudan
St. Vincent & Grenadines
Sudan
Suriname
Sweden
○ Sweden
○ Syria
○ Tajikistan
○ Tanzania
○ Thailand
○ Timor-Leste
Tonga
 Trinidad and Tobago
○ Turkey
Turkmenistan
○ Tuvalu
○ Uganda
○ Ukraine
United Arab EmiratesUnited States
Uruguay
○ Uzbekistan
○ Vanuatu
○ Venezuela
○ Vietnam
○ Yemen
○ Zambia
○ Zimbabwe

NHS Trust	O LONDON NORTH WEST HEALTHCARE NHS TRUST
	 ROYAL CORNWALL HOSPITALS NHS TRUST HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS
	TRUST
	 ROYAL DEVON AND EXETER NHS FOUNDATION TRUST PORTSMOUTH HOSPITALS NHS TRUST
	ROYAL BERKSHIRE NHS FOUNDATION TRUST
	THE LEWISHAM AND GREENWICH NHS TRUST
	 NORTHERN LINCOLNSHIRE AND GOOLE NHS FOUNDATION TRUST
	○ THE ROYAL WOLVERHAMPTON NHS TRUST
	CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST
	 HAMPSHIRE HOSPITALS NHS FOUNDATION TRUST GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST
	O NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST
	O NORTH BRISTOL NHS TRUST
	 EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRU PENNINE ACUTE HOSPITALS NHS TRUST
	UNITED LINCOLNSHIRE HOSPITALS NHS TRUST
	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST
	 EAST AND NORTH HERTFORDSHIRE NHS TRUST WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST
	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TR
	EAST SUSSEX HEALTHCARE NHS TRUST
	 MID YORKSHIRE HOSPITALS NHS TRUST SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TR
	EAST LANCASHIRE HOSPITALS NHS TRUST
	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST
	WESTERN SUSSEX HOSPITALS NHS FOUNDATION TRUST
	 ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TF TORBAY AND SOUTH DEVON HEALTH CARE NHS FOUNDATION
	TRUST
	O SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TR
	 ○ TAUNTON AND SOMERSET NHS FOUNDATION TRUST ○ WALSALL HEALTHCARE NHS TRUST
	O ST HELENS AND KNOWSLEY TEACHING HOSPITALS NHS
	LUTON AND DUNSTABLE UNIVERSITY HOSPITAL NHS FOUNDATION TRUST
	ROYAL UNITED HOSPITALS BATH NHS FOUNDATION TRU
	O BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS
	FOUNDATION TRUST © EAST SUFFOLK AND NORTH ESSEX NHS FOUNDATION TF
	FRIMLEY HEALTH NHS FOUNDATION TRUST
	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPI
	NHS FOUNDATION TRUST AINTREE UNIVERSITY HOSPITAL NHS FOUNDATION TRUS
	THE ROTHERHAM NHS FOUNDATION TRUST
	NORTH WEST ANGLIA NHS FOUNDATION TRUST
	 CROYDON HEALTH SERVICES NHS TRUST SHERWOOD FOREST HOSPITALS NHS FOUNDATION TRUST
	WHITTINGTON HEALTH NHS TRUST
	O BOLTON NHS FOUNDATION TRUST
	○ GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST ○ THE DUDLEY GROUP NHS FOUNDATION TRUST
	NORTHAMPTON GENERAL HOSPITAL NHS TRUST
	MEDWAY NHS FOUNDATION TRUST
	MID ESSEX HOSPITAL SERVICES NHS TRUST
	 HOMERTON UNIVERSITY HOSPITAL NHS FOUNDATION TF WIGAN AND LEIGH NHS FOUNDATION TRUST
	ASHFORD AND ST. PETER'S HOSPITALS NHS FOUNDATIO
	TRUST SURREY AND SUSSEX HEALTHCARE NHS TRUST
	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS
	FOUNDATION TRUST
	 NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUS WEST HERTFORDSHIRE HOSPITALS NHS TRUST
	STOCKPORT NHS FOUNDATION TRUST
	SISLE OF WIGHT NHS TRUST
11-01-2021 11:39	○ ESSEX PARTNERSHIPCHANINERS ITY NET ENDINOTED N TRU
	-

O COUNTY DURHAM AND DARLINGTON NHS FOUNDATION
BUCKINGHAMSHIRE HEALTHCARE NHS TRUST
○ WESTON AREA HEALTH NHS TRUST
YEOVIL DISTRICT HOSPITAL NHS FOUNDATION TRUST
NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST
THE HILLINGDON HOSPITALS NHS FOUNDATION TRUST
\circ
KINGSTON HOSPITAL NHS FOUNDATION TRUST
O DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST
○ THE MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST
NORTHERN DEVON HEALTHCARE NHS TRUST
© BEDFORD HOSPITAL NHS TRUST
<u> </u>
9
○ AIREDALE NHS FOUNDATION TRUST
○ THE QUEEN ELIZABETH HOSPITAL KING'S LYNN NHS
FOUNDATION TRUST
O POOLE HOSPITAL NHS FOUNDATION TRUST
MILTON KEYNES HOSPITAL NHS FOUNDATION TRUST
O SOUTH TYNESIDE NHS FOUNDATION TRUST
○ BARNSLEY HOSPITAL NHS FOUNDATION TRUST
○ CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRU
() JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION
TRUST
WEST SUFFOLK NHS FOUNDATION TRUST
O SOUTH WARWICKSHIRE NHS FOUNDATION TRUST
○ EAST CHESHIRE NHS TRUST
COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TR
WYE VALLEY NHS TRUST
GEORGE ELIOT HOSPITAL NHS TRUST
TAMESIDE HOSPITAL NHS FOUNDATION TRUST
<u> </u>
O DARTFORD AND GRAVESHAM NHS TRUST
○ NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST
KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUS
SALISBURY NHS FOUNDATION TRUST
THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST
GATESHEAD HEALTH NHS FOUNDATION TRUST
O SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST
○ WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION
TRUST
O ROYAL NATIONAL ORTHOPAEDIC HOSPITAL NHS TRUST
CLIVERPOOL HEART AND CHEST NHS FOUNDATION TRUST
ALDER HEY CHILDRENS NHS FOUNDATION TRUST
THE CHRISTIE NHS FOUNDATION TRUST
○ SHEFFIELD CHILDRENS NHS FOUNDATION TRUST
CLATTERBRIDGE CANCER CENTRE NHS FOUNDATION TR
LIVERPOOL WOMEN'S NHS FOUNDATION TRUST
WALTON CENTRE NHS FOUNDATION TRUST
ROYAL PAPWORTH HOSPITAL NHS FOUNDATION TRUST
O ROBERT JONES AND AGNES HUNT ORTHOPAEDIC HOSPI
NHS FOUNDATION TRUST
O GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS
FOUNDATION TRUST
MOORFIELDS EYE HOSPITAL NHS FOUNDATION TRUST
QUEEN VICTORIA HOSPITAL NHS FOUNDATION TRUST
THE ROYAL MARSDEN NHS FOUNDATION TRUST
○ BIRMINGHAM WOMEN'S AND CHILDREN'S NHS FOUNDAT
TRUST
O ROYAL ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUS
O ROYAL BROMPTON AND HAREFIELD NHS FOUNDATION T
\circ
O BARTS HEALTH NHS TRUST
○ UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRU
O BRADFORD TEACHING HOSPITALS NHS FOUNDATION TR
ROYAL FREE LONDON NHS FOUNDATION TRUST
○ WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDAT
C C CITTE CONDA

○ YORK TEACHING HOSPITAL NHS FOUNDATION TRUST
 ○ CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION
 ○ UNIVERSITY HOSPITAL SOUTHAMPTON NHS FOUNDATION

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUGUY'S AND ST THOMAS' NHS FOUNDATION TRUST

TRUST

TRUST

O ST GEORGE'S UNIVERSITY HOSPITALS NHS FOUNDATION TRUST
UNIVERSITY HOSPITAL OF NORTH MIDLANDS NHS TRUST
○ KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST
UNIVERSITY HOSPITALS PLYMOUTH NHS TRUST
O UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE
TRUST
O NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS
FOUNDATION TRUST
SALFORD ROYAL NHS FOUNDATION TRUST
O DONCASTER AND BASSETLAW TEACHING HOSPITALS NH
FOUNDATION TRUST
O ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY
HOSPITALS NHS TRUST
CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION
TRUST
○ LEEDS TEACHING HOSPITALS NHS TRUST
O UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION
TRUST
O UNIVERSITY COLLEGE LONDON NHS FOUNDATION TRUST
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDAT
TRUST
O UNIVERSITY HOSPITALS OF DERBY AND BURTON NHS
FOUNDATION TRUST
OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRU
O SOUTH TEES HOSPITALS NHS FOUNDATION TRUST
C EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TO
HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST
O UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST
O NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST
O BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TR
O BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TF
C LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION T
IMPERIAL COLLEGE HEALTHCARE NHS TRUST
Belfast Health and Social Care Trust
Northern Health and Social Care Trust
Northern Ireland Ambulance Service Health and
Social Care Trust
 South Eastern Health and Social Care Trust
Southern Health and Social Care Trust
Western Health and Social Care Trust
NHS Ayrshire and Arran
NHS Borders
NHS Dumfries and Galloway
NHS Western Isles
NHS Fife Fife
NHS Forth Valley
NHS Grampian Aberdeenshire
NHS Greater Glasgow and Clyde
NHS Highland
NHS Lanarkshire
NHS Lothian
NHS Orkney
NHS Shetland
NHS Tayside
Swansea Bay University Health Board
Aneurin Bevan Local Health Board
Betsi Cadwaladr University Health Board
Cardiff and Vale University Health Board
Cwm Taf Morgannwg University Health Board
O Hywel Dda University Health Board
O Powys Teaching Health Board

Hospital name	Barnet Hospital Barts Hospital Central Middlesex Hospital Chairing Cross Hospital Chase Farm Hospital Chelsea and Westminster Hospital Croydon University Hospital Ealing Hospital Great Ormond Street Hospital Guy's Hospital Hammersmith Hospital Harefield Hospital Hillingdon Hospital Hillingdon Hospital King George's Hospital King's College Hospital Kingston Hospital Lewisham Hospital North Middlesex University Hospital NHS Trust Northwick Park Hospital Princess Royal University Hospital Queen Elizabeth Hospital Queen Mary's Hospital Queen Mary's Hospital Royal Brompton Hospital Royal Free London University College London Hospital Royal Marsden Hospital Royal Marsden Hospital St George's Hospital St Helier Hospital St Helier Hospital St Hospital West Middlesex University Hospital Whipps Cross University Hospital Whipps Cross University Hospital Whipps Cross University Hospital Whittington Hospital Other
Hospital Name	
Team Name i.e. General Surgery St Marys, Breast Surgery Charing Cross	
Please confirm that you have hospital ethical approval for entering data into the PanSurg Predict Database	 Our site has ethical approval from our local institution to enter data into the PanSurg Predict Database



What specialty is the department you are registering for?	 □ Emergency surgery □ Colorectal surgery □ Oesophago-gastric surgery □ Hepatopancreaticobiliary surgery □ Bariatric surgery □ Vascular surgery □ General surgery □ Breast surgery □ Orthopaedic surgery □ Gynaecology & Obstetrics □ Paediatric surgery □ Maxillofacial Surgery □ ENT surgery □ Plastic surgery □ Plastic surgery □ Cardiac surgery □ Thoracic surgery □ Sarcoma and soft tissue cancer surgery □ Endocrine Surgery □ Other - please confirm below
Other specialty	
Your Team PRE-COVID CRISIS	
How many consultants/attending surgeons are on your surgical team rota?	
How many surgical registrars/residents are on your surgical team rota?	
How many junior doctors/interns are on your surgical team rota?	
How many physicians associates/surgical nurse practitioners are on your surgical team rota?	
Your Team since the COVID CRISIS	
Has your team been restructured since the covid crisis began?	
How many consultants are now on your surgical team rota?	
How many registrars are now on your surgical team rota?	
How many junior doctors are now on your surgical team rota?	
How many physicians associates/surgical nurse practitioners are now on your surgical team rota?	



Your Hospital Facilities PRE-COVID CRISIS		
Number of ITU/HDU beds in your hospital		_
Number of dedicated operating theatres in you hospital		_
Of these how many are dedicated daycase theatres?		_
Number of recovery beds in you hospital		_
Your Hospital Facilities since the COVID CRISIS		
Have your facilities been restructured since the covid crisis began?		
New number of ITU/HDU beds in your hospital		_
New number of Operating theatres in you hospital		_
Of these how many are dedicated daycase theatres?		_
New number of Recovery beds in you hospital		_
Lead User Details		
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs○ Ms	
First name		_
Surname		_
Email		_



Additional	User	registration
Additional	0301	i egisti ation

Please register other members of the team whom will be collecting data. You can consider adding generic email addresses if you have any. Please add all sprs in your team that will be oncall in your department and will be able to complete the daily surveys. We suggest this may be best completed at the start of the morning handover meeting

How many additional users at your site will be entering data to this project?	○ 0 ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 11 ○ 12 ○ 13
Team User 1	
Title	 ○ Dr ○ Prof ○ Miss ○ Mr ○ Mrs
First name	
Surname	
Email	
Team User 2	
Title	 ○ Dr ○ Prof ○ Miss ○ Mr ○ Mrs
First name	
Surname	
Email	

Team User 3

Title	○ Dr○ Prof○ Miss○ Mr○ Mrs
First name	
Surname	
Email	
Team User 4	
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs
First name	
Surname	
Email	
Team User 5	
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs
First name	
Surname	
Email	
Team User 6	
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs

First name		
Surname		
Email		
Team User 7		
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs	
First name		
Surname		
Email		
Team User 8		
Title	Or Prof Miss Mr Mrs	
First name		
Surname		
Email		
Team User 9		
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs	
First name		
Surname		

Email	
Team User 10	
Title	 ○ Dr ○ Prof ○ Miss ○ Mr ○ Mrs
First name	
Surname	
Email	
Team User 11	
Title	 ○ Dr ○ Prof ○ Miss ○ Mr ○ Mrs
First name	
Surname	
Email	
Team User 12	
Title	○ Dr○ Prof○ Miss○ Mr○ Mrs
First name	
Surname	
Email	
Toam User 13	

Team User 13

Title	○ Dr○ Prof○ Miss○ Mr○ Mrs
First name	
Surname	
Email	

After you select 'Submit', below, you will be asked to check if there are any missing fields in your registration.

Your registration will not be completed until all missing fields have been filled.

Exact information would be preferable but if you do not have it at present, please insert an estimated number. We will send you an email to confirm the information in 3 days time so you may update your site registration with the correct numbers then.

Thank you very much for you collaboration

The PanSurg Collaborative



Presentation

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.	
Please confirm that you have local approval for entering data into the PanSurg Predict Database	 Our site has local approval to enter data into the PanSurg Predict Database
PanSurg-Predict Database Patient Presentation	
Demographics	
Date & time of presentation to clinic or A&E	
	(Please complete time to best of your ability)
Date of birth	
Gender	○ Male○ Female○ Other
ВМІ	Enter Height / Weight (if known)Enter BMI (if known)Height, Weight and BMI unavailable
ВМІ	
Height	
	(m)
Weight	
	(kg)
ВМІ	
EthnicityFor details see this link	 ○ White (1-4) ○ Mixed / Multiple Ethnic Groups' (5-8) ○ Asian / Asian British (9-13) ○ Black / African / Caribbean / Black British (14-16) ○ Other Ethnic Group (17-18) ○ Unknown
Presentation	

Presentation



11-01-2021 11:41

Presentation	○ Elective○ Emergency
Is patient presenting with a new or suspected cancer diagnosis?	○ Yes ○ No
Was the patient's case discussed at the Multi Disciplinary meeting?	○ Yes ○ No
Referral or Admission Speciality	 Emergency surgery Colorectal surgery Oesophago-gastric surgery Hepatopancreaticobiliary surgery Bariatric surgery Vascular surgery General surgery Paediatric surgery Urology Thoracic Surgery Cardiac Surgery Endocrine Surgery Trauma & Orthopaedics Trauma Surgery Other
Date of Cancer diagnosis if applicable	
Date of MDT discussion if applicable	(MDT = Multidisciplinary cancer panel)
TNM at time of MDT discussion/presentation if applicable	
MDT/clinicians decision	Proceed to surgeryDefer surgeryNot for surgery
NHS patient categorisation if applicable	 PRIORITY LEVEL 1a: EMERGENCY operation needed within 24 hrs to save life PRIORITY LEVEL 1b: URGENT operation needed with 72 hrs PRIORITY LEVEL 2: ELECTIVE surgery/treatment with the expectation of cure needed within four weeks to save life/stop progression, taking into account symptoms and potential complications from lack of treatment PRIORITY LEVEL 3: ELECTIVE surgery can be delayed for 10 to 12 weeks and will have no predicted negative outcome.
Decision to defer	 Not deemed sufficiently urgent according to national guidelines □ Patient comorbidities makes admission/surgery too high risk at time of COVID-19 □ Lack of resources (eg theatre staff/ITU bed unavailable due to COVID) □ Other

Deferral due to comorbidities	 □ Diabetes □ Heart disease □ Respiratory disease □ Renal failure □ Transplant patient □ Unlikely to survive hospital acquired COVID infection □ Requires level 2-3 post-operative care □ current COVID illness □ Other
Other comorbidity causing deferral	
Other decision to defer	
Deferral time	☐ 1-3 months ☐ 3- 6 months ☐ > 6 months ☐ Post pandemic ☐ Other non defined
Paediatric Surgery presentation	 Appendicitis Hernia Intusussception Hypertrophic pyloric stenosis Testicular torsion Foreign body Oesophageal atresia Malrotation or Volvulus Hirschprung's disease Intestinal obstruction Abdominal wall defect Necrotising Enterocolitis Undiscended testes Other
Other Paediatric Surgery presentation	
Acute Surgical presentation	 Abscess Appendicitis Cholecystitis Biliary colic Obstructive jaundice Pancreatitis UGI perforation Lower GI perforation Upper GI bleed Bowel obstruction Meckel's diverticulitis Diverticulitis Lower GI Bleed Benign anorectal condition Hernia - please enter details below Unspecified abdominal pain O&G related presentation

Thoracic pathology	BenignMalignant - LungMalignant - PleuralMalignant - SecondaryOther
Other thoracic pathology details	
Endocarditis	
Acute aortic syndrome	○ Yes ○ No
Endocrine disease	Thyroid diseaseParathyroid diseaseAdrenal disease
Indication for Thyroid surgery	 Biopsy result Clinically worrying lesion Completion thyroidectomy for cancer Compressive symptoms Quality of Life Recurrent cancer Recurrent cyst Thyroglossal cyst Thyrotoxicosis
Thyroid Fine Needle Aspiration biopsy Classification	○ NHS○ Bethesda
Thyroid FNA biopsy - NHS classification	 ○ Thy1 Non diagnostic ○ Thy2 Non neoplastic ○ Thy3a Neoplasm possible (atypical) ○ Thy3f Follicular neoplasm ○ Thy4 Suspicious of malignancy ○ Thy5 Diagnostic of malignancy
Thyroid FNA biopsy - Bethesda classification	 ○ I - Non-diagnostic ○ II - Benign ○ III - AUS/FLUS ○ IV - Suspicion for follicular neoplasm ○ V - Suspicion for malignancy ○ VI - Malignant
Goitre size	CervicalRetroclavicularAbove Aortic archBelow Aortic arch
Indication for Parathyroid surgery	Primary HyperparathyroidismHyperparathyroidism of renal originSuspicion of malignancy
Corrected Calcium level (mmol/L)	



Indication for Adrenal surgery	 □ Phaeochromocytoma □ Adrenocortical Carcinoma □ Suspicious on imaging □ Conn's adenoma □ Cushing's adenoma □ Control of Cushing's □ Metastasis
Bowel obstruction	 Adhesional SB obstruction Internal Hernia after bariatric surgery Other hernia - see below Colorectal ca Volvulus Benign stricture Other
Paediatric bowel obstruction	○ Duodenal Atresia○ Jejunal-ileal atresia○ Meconium ileus○ Hernia○ Other
Hinchey classification	 0 - Mild clinical diverticulitis - Diverticuli ± colonic wall thickening la - Confined pericolic inflammation or phlegmon - Colonic wall thickening with pericolic soft tissue changes lb - la + Pericolic or mesocolic abscess ll - la + Pelvic, distant intraabdominal, or retroperitoneal abscess lll - Generalized purulent peritonitis lV - Generalized fecal peritonitis
Hernia type	 ☐ Inguinal ☐ Femoral ☐ Umbilical ☐ Epigastric ☐ Hiatus ☐ Diaphragmatic ☐ Ventral ☐ Incisional ☐ Spigellian ☐ Lumbar
Hernia severity	 Painful uncomplicated Incarcerated uncomplicated Incarcerated with bowel obstruction Strangulated
Colorectal	○ Colonic cancer○ Rectal cancer○ Diverticular○ IBD○ Haemorrhoids
Oesophago-gastric	Esophageal cancerGastric cancerGORDHiatal herniaAchalasia

Page 6

Hepatopancreaticobiliary	Liver cancerPancreatic cancerGallstone disease
Bariatric	Weight loss surgeryPostoperative complication (specific)
Vascular	 Amputation Lower limb revascularisation AAA TAAA Carotid surgery Aortic dissection Other
General	Abdominal wall hernia non-emergent
Number of injuries	○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10
Date of injury	
Underlying pathology/mechanism of injury	 ○ Arthritis ○ Cartilage damage ○ Ligamentous instability ○ Infection ○ Foreign body ○ Pathological ○ Crush injury ○ Trauma ○ Other

Mechanism of Injury	Blast Blow - Accidental Blow - Assault Burn Burn - chemical Cardiac Arrest Crush Injury Deliberate self harm Drowning Electrocution Fall less than 2m Fall more than 2m Hanging Inhalation Jump less than 2m One Under (train) Shooting - Accidental Shooting - Assault Shooting - Deliberate Self Harm Slashing (laceration) - Assault Slashing (laceration) - Ascidental Slashing (laceration) - Self-harm Sports injury Stabbing - Accidental Stabbing - Assault Stabbing - Accidental Stabbing - Accidental Stabbing - Assault Stabbing - Assault Stabbing - Peliberate Self Harm Unknown Vehicle Incident/Collision - Cyclist Vehicle Incident/Collision - Motorcyclist Vehicle Incident/Collision - Passenger Vehicle Incident/Collision - Passenger Vehicle Incident/Collision - Pedestrian Vehicle Incident/Collision - Vehicle driver DIY (do-it-yourself)/Home improvements & repairs
Frauma called	○ Yes ○ No

Injury 001



Area of procedure	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot
T&O Area of Injury 001	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot
Affected side	○ Left○ Right○ Bilateral
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment
Articular involvement	○ Extra-articular○ Intra-articular

Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incomped 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 001	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 001	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 001	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 001	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 001	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 001	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 001	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 001		
Injury 002		
T&O Area of Injury 002	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 002	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	

Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 002	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 002	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 002	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 002	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 002	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 002	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise



Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 002	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 002		
Injury 003		
T&O Area of Injury 003	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 003	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	

REDCap°

Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 003	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 003	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 003	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 003	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 003	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 003	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise



Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 003	Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None	
Other injury 003	-	
Injury 004		
T&O Area of Injury 004	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 004	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	



Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	tent (≤20.5 mm)
Localisation of Hand injury 004	 ○ Lunate ○ Scaphoid ○ Capitate ○ Hamate ○ Trapezium ○ Other carpal bones ○ Metacarpals ○ Phalanges
Localisation of Foot injury 004	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 004	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 004	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 004	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 004	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise



Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 004	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 004		
Injury 005		
T&O Area of Injury 005	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 005	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	



Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incomped 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 005	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 005	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 005	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 005	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 005	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 005	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 005	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 005		
Injury 006		
T&O Area of Injury 006	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 006	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	



Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incomped 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 006	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 006	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 006	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 006	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 006	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 006	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 006	Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None	
Other injury 006		
Injury 007		
T&O Area of Injury 007	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 007	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	



Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 007	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 007	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 007	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 007	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 007	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 007	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise



Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 007	Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None	
Other injury 007		
Injury 008		
T&O Area of Injury 008	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 008	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	



Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	etent (≤20.5 mm)
Localisation of Hand injury 008	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 008	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 008	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 008	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 008	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 008	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 008	Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None	
Other injury 008		
Injury 009		
T&O Area of Injury 009	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 009	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	

Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	tent (≤20.5 mm)
Localisation of Hand injury 009	 ○ Lunate ○ Scaphoid ○ Capitate ○ Hamate ○ Trapezium ○ Other carpal bones ○ Metacarpals ○ Phalanges
Localisation of Foot injury 009	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 009	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 009	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 009	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 009	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 009	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 009		
Injury 010		
T&O Area of Injury 010	Cervical spine Scapula Clavicle Shoulder Humerus Elbow Radius Ulna Hand & Wrist Thorax & Ribs Thoracic spine Lumbosacral spine Pelvis/Pelvic Ring Acetabulum Femur & Hip Knee Patella Tibia Fibula Ankle Foot	
Affected side of injury 010	○ Left○ Right○ Bilateral	
Fracture Location	Proximal third segmentDiaphyseal/middle third segmentDistal third segment	
Articular involvement	○ Extra-articular○ Intra-articular	

Proximal end segment	
 31A1, Simple pertrochanteric 31A2, Multifragmentary pertrochanteric, lateral wall incompe 31A3, Intertrochanteric (reverse obliquity) 31B1, Subcapital 31B2, Transcervical 31B3, Basicervical 31C1, Split of femoral head 31C2, Depression of femoral head Subtrochanteric fracture 	tent (≤20.5 mm)
Localisation of Hand injury 010	 ☐ Lunate ☐ Scaphoid ☐ Capitate ☐ Hamate ☐ Trapezium ☐ Other carpal bones ☐ Metacarpals ☐ Phalanges
Localisation of Foot injury 010	○ Talus○ Calcaneus○ Navicular○ Cuboid○ Cuneiforms○ Metatarsals○ Phalanges
T&O Type of injury 010	 Non displaced fracture □ Displaced fracture □ Open fracture □ Closed fracture □ Dislocation □ Subluxation/ligamentous instability □ Traumatic Amputation □ Paediatric fracture □ None of the above
Pelvic Fracture Classification Injury 010	○ Lateral compression○ Anterior-Posterior compression○ Vertical shear○ Combined○ Other
Acetabular Fracture Classification Injury 010	○ Wall OR column fracture○ Wall AND column fracture○ Transverse○ Other
Spinal Injury Classification Injury 010	 ○ Stable fracture ○ Unstable fracture ± dislocation ○ Ligamentous instability ○ Cord injury/neurological compromise

Salter-Harris Classification		
 Type I - transverse fracture through the growth plate. Type II - A fracture through the growth plate and the metaphysis, sparing the epiphysis Type III - A fracture through growth plate and epiphysis, sparing the metaphysis. Type IV - A fracture through all three elements of the bone, the growth plate, metaphysis, and epiphysis. Type V - A compression fracture of the growth plate (resulting in a decrease in the perceived space between the epiphysis and metaphysis on x-ray) 		
Other injury 010	 Periprosthetic fracture Native joint dislocation Arthroplasty dislocation Prosthetic Joint Infection Soft tissue infection Haematoma Compartment syndrome Neurovascular injury Ligament/tendon injury Other None 	
Other injury 010		
Fascio-Iliacus Nerve block at presentation	○ Yes ○ No	
Meets Best Practice Tariff (UK only)	○ Yes ○ No	
Injury	○ Blunt○ Penetrating	
Number of injuries	○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10	
Area on injury #1	☐ Head & Neck ☐ Face ☐ Thorax ☐ Abdomen ☐ Pelvis ☐ Limbs	
Primary intended treatment at presentation	 Surgery Conservative including Abx or radiology or endoscopy No intervention 	

REDCap°

Radiological and Endoscopic Interventions	Drain insertionERCPTherapeutic endoscopyOtherNone
Other Radiological or endoscopic intervention details	
Investigations During Presentation	
Blood Tests	
Did patient have blood test on presentation?	○ Yes ○ No
Serum creatinine	
Blood lactate	
C-reactive protein	
Albumin	
Sodium	
Potassium	
Urea	
Haemoglobin	
White cell count	
Lymphocyte count	
Bilirubin	
Observations	
Did patient have observations taken on presentation?	○ Yes ○ No

Temperature	
SpO2	
FiO2	(Fraction Inspired Oxygen for Saturation measurement above)
Pulse Rate	
Systolic blood pressure	
Glasgow coma scale	0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0 10 0 11 0 13 0 14
Radiological Investigations	
Did patient undergo radiological investigations on presentation?	○ Yes ○ No
Select which radiological investigations the patient received during presentation	 □ Abdominal XRay □ Chest XRay □ Computerised Tomography Abdomen Pelvis □ Computerised Tomography Chest Abdomen Pelvis □ Computerised Tomography Chest □ Magnetic Resonance Imaging □ Ultrasound Doppler □ Abdominal/Pelvis Ultra Sound Scan □ Ultra Sound Scan Neck □ Computerised Tomography Neck □ Computerised Tomography Adrenal □ Xray other □ Computerised Tomography other □ Limb XRay □ Trauma Xray Series □ Computerised Tomograph Limb +/- Angiogram □ Computerised Tomograph Spine □ Trauma Computerised Tomograph (Head to Pelvis +/- limbs) □ Other



Date of AXR	
Paste AXR Result	
	(Please do not include patient identifiable information.)
Date of CXR	
Paste CXR Result	
	(Please do not include patient identifiable information.)
Date of CT AP	
Paste CT AP Result	
	(Please do not include patient identifiable information.)
Date of CT CAP	
	
Paste CT CAP Result	
	(Please do not include patient identifiable information.)
Date of CT Chest	
Paste CT Chest Result	
	(Please do not include patient identifiable information.)
Date of Magnetic resonance imaging	
Paste Magnetic resonance imaging Result	
	(Please do not include patient identifiable information.)
Date of Ultrasound Doppler	



Paste Ultrasound Doppler Result	
	(Please do not include patient identifiable information.)
Date of Abdominal/Pelvis Ultrasound	
Paste Abdominal/Pelvis Ultrasound Result	
	(Please do not include patient identifiable information.)
Date of USS Neck	
Paste USS Neck Result	
	(Please do not include patient identifiable information.)
Date of CT Neck	
Paste CT Neck Result	
	(Please do not include patient identifiable information.)
Date of CT Adrenal	
Paste CT Adrenal Result	
	(Please do not include patient identifiable information.)
Other Xray - body area	
Date of Other Xray	
Paste Other Xray Result	
	(Please do not include patient identifiable information.)
Other Computerised Tomography - body area	



Date of Other Computerised Tomography	
Paste Other Computerised Tomography Result	
	(Please do not include patient identifiable information.)
Date of Limb Xray	
Paste Limb Xray Result	
	(Please do not include patient identifiable information.)
Date of Trauma Xray Series	
Paste Trauma Xray Series Result	
	(Please do not include patient identifiable information.)
Date of Computerised Tomograph Limb +/- Angiogram	
Paste Computerised Tomograph Limb +/- Angiogram Result	
	(Please do not include patient identifiable information.)
Date of Computerised Tomograph Spine	
Paste Computerised Tomograph Spine Result	
	(Please do not include patient identifiable information.)
Date of Trauma Computerised Tomograph (Head to Pelvis +/- limbs)	
Paste Trauma Computerised Tomograph (Head to Pelvis +/- limbs) Result	
	(Please do not include patient identifiable information.)
Other Investigation - body area	



Date of Other Investigation	
Paste Other Investigation Result	
	(Please do not include patient identifiable information.)
COVID-19 Investigations	
Known COVID-19 Status at time of presentation	○ Known○ Unknown
COVID-19 status at time of presentation	○ Positive○ Negative
Was COVID-19 status newly assessed at presentation?	
How was Covid Status newly assessed at time of presentation?	☐ Swab test ☐ CXR ☐ CT
What was the result of COVID-19 swab test at time of presentation	PositiveNegativePending
Date of swab test at presentation	
What was the result of CXR test for COVID-19 at time of presentation	PositiveNegativePending
Date of CXR at presentation	
What was the result of CT test for COVID-19 at time of presentation	PositiveNegativePending
Date of CT at presentation	
Management Decisions	
Has surgical department capacity affected decision to operate?	
Has the patients Covid Status affected decision to operate?	
Has the Covid pandemic affected the decision to operate?	○ Yes ○ No



Patient Details Date of Birth[pres_dob] Gender[pres_gen]



Past Medical History

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.	
PanSurg-Predict Database Past Medical History	
Patient Details Date of Birth[pres_dob] Gender[pres_gen]	
Respiratory history / CXR appearance	 No dyspnoea / Dyspnoea on exertion or CXR: mild COAD Dyspnoea limiting exertion to < 1 flight or CXR: moderate COAD Dyspnoea at rest/rate >30 at rest or CXR: fibrosis or consolidation Unknown
Medical Research Council Dyspnea Score	 category 0, No dyspnea category 1, Slight degree of dyspnea (troubled by shortness of breath when hurrying on the level or walking up a slight hill) category 2, Moderate degree of dyspnea (walks slower than people of the same age on the level because of breathlessness) category 3, Moderately severe degree of dyspnea (has to stop because of breathlessness when walking at own pace on the level) category 4, Severe degree of dyspnea (stops for breath after walking about 100 yards or after a few minutes on the level) category 5, Very severe degree of dyspnea (too breathless to leave the house or breathless when dressing or undressing)
FEV1	
FVC	
ppoFEV1 if applicable	
TLCO / KCO	
Cardiovascular system - ECG	 No abnormalities / AF rate 60-90bpm / AF rate >90/ Any other abnormal rhythm/paced rhythm/ >5VE/mi Q, ST or T wave abnormalities Unknown



Page 2

Pulmonary Hypertension	○ No○ Moderate (systolic PA 31-55 mmHg)○ Severe (systolic PA >55 mmHg)
Smoking status	SmokerNot a smokerEx smokerUnknown
World Health Organization (WHO) Zubrod Performance Status Scale	 0: Normal activity 1: Symptoms, but nearly fully ambulatory 2: Some bed time, but needs to be in bed less than 50% of normal daytime 3: Need to be in bed greater than 50% of normal daytime 4: Unable to get out of bed
Clinical Frailty Scale See above image	0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9
Residence	 ○ Home ○ Nursing home ○ Residential home ○ Hospice ○ Sheltered accommodation ○ Homeless ○ Prison ○ Hospital/health care units ○ Institution ○ Other
Pre-fracture mobility	○ Without aids○ Walking stick(s)○ Zimmer Frame/Walking frame○ Wheelchair○ Bedbound
Where did the injury take place?	○ Home/place of residence○ Hospital○ Outside home/place of residence

Charlson Co-Mobidity Factors	 Myocardial infaction Congestive heart failure Peripheral vascular disease Cerebrovascular disease or TIA Dementia Chronic pulmonary disease Rheumatic disease History of Peptic ulcer disease Liver disease Diet-contolled Diabetes Diabetes with no complication Diabetes with end-organ damage Hemiplegia or paraplegia Any malignancy without metastasis Leukaemia Lymphoma Metastatic solid tumour AIDS (excluded asymptomatic infection) None of the above
Other Cardiac History	 ☐ Hypertension ☐ Hypercholesterolaemia ☐ Myocardial infarction within 90 days ☐ CCS class 4 angina (Canadian Cardiovascular Society) ☐ Previous Cardiac surgery ☐ Pre-op cardiogenic shock ☐ IABP requirement pre-op
New York Heart Association Functional Classification	 I - No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath). II - Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath). III - Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea. IV - Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.
Left Ventricular function	Good (LVEF >50%)Moderate (LVEF 31% - 50%)Poor (LVEF 21-30%)Very poor (LVEF 20% or less)
Critical preoperative state	 Yes No (ventricular tachycardia or ventricular fibrillation or aborted sudden death, preoperative cardiac massage, preoperative ventilation before anaesthetic room, preoperative inotropes or IABP, preoperative acute renal failure (anuria or oliguria < 10ml/hr))



Liver disease Severe, cirrhosis and portal hypertension with variceal bleeding history Moderate, cirrhosis and portal hypertension but no variceal bleeding history Mild, chronic hepatitis (or cirrhosis without portal hypertension)	MildModerate to severe
Does patient have moderate or severe renal disease Severe, on dialysis, status post kidney transplant, uremia Moderate, creatinine >3 mg/dL (270 micromol/L)	○ Yes ○ No
Any active malignancy in last 20 years? (excluding SCC and BCC)	YesNo
Alcohol dependence?	YesNo
Any additional co-morbidities?	○ Yes ○ No
Other medical comorbidities	
Relevant medication	□ ACE inhibitors □ Cardiac drugs □ NSAIDS □ Warfarin □ Steroids □ Other immunosuppressants (specify) □ Insulin □ None □ NOAC □ UFH (Unfractionated heparin) □ LMWH (low molecular weight heparin) □ Clopidogrel/antiplatelet (other than NSAIDS)
Other immunosuppressants	
Which NSAIDs did the patient receive?	☐ Aspirin ☐ Ibuprofen ☐ Diclofenac ☐ Celecoxib ☐ Indomethacin ☐ Naproxen ☐ Ketorolac ☐ Ketoprofen ☐ Other
Other NSAID - please give details	

Page 5

Endocrine drugs	☐ Cinacalcet ☐ Phenoxybenzamine ☐ Beta-blocker ☐ Other ☐ None
Endocrine drugs Other	
Patient Details Date of Birth[pres_dob] Gender[pres_gen]	



Evaluation Of Operative Management

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.	
PanSurg-Predict Database Evaluation of Operative Manageme	ent
Patient Details Date of Birth[pres_dob] Gender[pres_gen]	
Was patient tested for COVID-19 pre-operatively?	☐ Yes - Nasopharyngeal swab ☐ Yes - Antibody test ☐ Yes - Serum Antibody titre ☐ No (This includes testing prior to elective admission eg in pre-operative assessment clinic, with a home kit or on at a specifically arranged outpatient attendance as well as at the time of elective admission.)
Date of COVID-19 testing	
Was patient radiologically tested for COVID-19 pre-operatively?	☐ Yes - Chest XRay ☐ Yes - Computerised Tomography ☐ No
Date of COVID-19 Imaging testing	
On the basis of these investigations what was the patient's COVID19 status?	 Negative Positive - current infection Positive - previous infection Inconclusive/Unknown Still pending
COVID-19 swab testing during the patient's presentation was recorded as pending. Has the result been processed at the time operative management evaluation?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 CXR scan assessment during the patient's presentation was recorded as pending. Has the result been processed at the time operative management evaluation?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 computerised tomography scan assessment during the patient's presentation was recorded as pending. Has the result been processed at the time operative management evaluation	Pending result is now positivePending result is now negativeResult is still pending
Admission Details	
Was patient admitted under your surgical team?	○ Yes ○ No



11-01-2021 11:41

Was patient admitted under your surgical team prior to the day of surgery?	○ Yes○ No
Was patient asked to isolate pre-operatively?	Yes - 7 daysYes - 14 daysOtherNo
Date of admission	
Was patient's surgery previously delayed due to a positive COVID-19 diagnosis?	
Was patient previously deferred from surgery due to the COVID-19 pandemic?	○ Yes ○ No
Was this patient previously entered by your team in the RedCap PREDICT Database?	○ Yes ○ No
Please enter REDCap ID number	
Has the patients Covid Status affected decision to admit?	
Has surgical department capacity affected decision to admit?	○ Yes ○ No
Management Decisions	
Was operative management evaluated for this patient?	○ Yes ○ No
Primary intended treatment after operative management evaluation	 Surgery Conservative including Abx or radiology or endoscopy No intervention
ASA - American Society of Anaesthesiologists' classification of Physical Health	 ○ Grade 1: A normal healthy patient ○ Grade 2: A patient with mild systemic disease ○ Grade 3: A patient with severe systemic disease ○ Grade 4: A patient with severe systemic disease that is a constant threat to life ○ Grade 5: A moribund patient who is not expected to survive >24 hours
Abbreviated Mental Test Score (AMTS)	
Was a geriatric assessment completed?	○ Yes ○ No
Was this performed by a Consultant Geriatrician?	YesNo



Time to geriatric assessment from presentation	<pre>< 24 hrs </pre> < 36 hrs < 72 hrs >72 hrs	
Nottingham Hip Fracture Score if known		
Pre-operative voice change	○ Yes ○ No	
Pre-operative vocal cord check performed	Yes - NormalYes - Vocal Cord palsyNo	
Radiological and Endoscopic Interventions	Drain insertionERCPTherapeutic endoscopyOtherNone	
Other Radiological or endoscopic intervention details		
Has surgical department capacity affected decision to operate?	○ Yes ○ No	
Has the patients Covid Status affected decision to operate?	○ Yes ○ No	
Further Investigations		
Most recent blood tests at time of surgery or when evaluating or	perative management	
Did patient have additional blood tests since presentation?	○ Yes ○ No	
Serum creatinine		
Blood lactate		
C-reactive protein		
Albumin		
Sodium		
Potassium		

Urea	
Haemoglobin	
White cell count	
Lymphocyte count	
D-Dimer	
Bilirubin	
Most recent observations at time of surgery when evaluating ope	erative management
Are most recent observations different from those at presentation?	○ Yes ○ No
Temperature	
SpO2	
FiO2	(Fraction Inspired Oxygen for Saturation measurement above)
Pulse Rate	
Systolic blood pressure	
Glasgow coma scale	 ○ 0 ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 11 ○ 13 ○ 14 ○ 15

Radiological Investigations

Did patient have further relevant radiological investigations since presentation?	Yes No
Select which radiological investigations the patient received during presentation	☐ Abdominal XRay ☐ Chest XRay ☐ Computerised Tomography Abdomen Pelvis ☐ Computerised Tomography Chest Abdomen Pelvis ☐ Computerised Tomography Chest ☐ Magnetic Resonance Imaging ☐ Ultrasound Doppler ☐ Abdominal/Pelvis Ultra Sound Scan ☐ Ultra Sound Scan Neck ☐ Computerised Tomography Neck ☐ Computerised Tomography Adrenal ☐ Xray other ☐ Computerised Tomography other ☐ Other
Date of AXR	
Paste AXR Result	
	(Please do not include patient identifiable information.)
Date of CXR	
Paste CXR Result	
	(Please do not include patient identifiable information.)
Date of CT AP	
Paste CT AP Result	
	(Please do not include patient identifiable information.)
Date of CT CAP	
Paste CT CAP Result	
	(Please do not include patient identifiable information.)
Date of CT Chest	



Paste CT Chest Result	
	(Please do not include patient identifiable information.)
Date of Magnetic resonance imaging	
Paste Magnetic resonance imaging Result	
	(Please do not include patient identifiable information.)
Date of Ultrasound Doppler	
Paste Ultrasound Doppler Result	
	(Please do not include patient identifiable information.)
Date of Abdominal/Pelvis Ultrasound	
Paste Abdominal/Pelvis Ultrasound Result	
	(Please do not include patient identifiable information.)
Date of USS Neck	
Paste USS Neck Result	
	(Please do not include patient identifiable information.)
Date of CT Neck	
Paste CT Neck Result	
	(Please do not include patient identifiable information.)
Date of CT Adrenal	



Paste CT Adrenal Result	
	(Please do not include patient identifiable information.)
Other Xray - body area	
Date of Other Xray	
Paste Other Xray Result	
	(Please do not include patient identifiable information.)
Other Computerised Tomography - body area	
Date of Other Computerised Tomography	
Paste Other Computerised Tomography Result	
	(Please do not include patient identifiable information.)
Other Investigation - body area	
Date of Abdominal/Pelvis Ultrasound	
Paste Abdominal/Pelvis Ultrasound Result	
	(Please do not include patient identifiable information.)
Date of Other Investigation	
Paste other investigation result	
Paste Other Investigation Result	
	(Please do not include patient identifiable information.)
COVID-19 Investigations	

Known COVID-19 Status at time of operative management evaluation	 ○ Known ○ Unknown (This includes testing prior to elective admission eg in pre-operative assessment clinic, with a home kit or on at a specifically arranged outpatient attendance as well as at the time of elective admission or during an emergency admission.)
COVID-19 status at time of operative management evaluation	PositiveNegative
Was COVID-19 status newly assessed time of operative management evaluation?	YesNo
How was Covid Status newly assessed at time of operative management evaluation?	☐ Swab test ☐ CXR ☐ CT
What was the result of COVID-19 swab test at time of operative management evaluation	○ Positive○ Negative○ Pending
Date of swab-test time of operative management evaluation	
What was the result of the CXR for COVID-19 at time of operative management evaluation	PositiveNegativePending
Date of CXR at time of operative management evaluation	
What was the result of the CT for COVID-19 at time of operative management evaluation	○ Positive○ Negative○ Pending
Date of CT at time of operative management evaluation	
Deticut Deteile	

Patient Details Date of Birth[pres_dob] Gender[pres_gen]



Surgery

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.	
PanSurg-Predict Database Surgery	
Patient Details Date of Birth[pres_dob] Gender[pres_gen]	
COVID-19 Test Results	
COVID-19 swab testing during the patient's presentation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 CXR scan assessment during the patient's presentation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 computerised tomography scan assessment during the patient's presentation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 swab testing during the patient's operative management evaluation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 CXR scan assessment during the patient's operative management evaluation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 computerised tomography scan assessment during the patient's operative management evaluation was recorded as pending. Has the result been processed by the time of surgery?	Pending result is now positivePending result is now negativeResult is still pending
Known COVID-19 Status at time of surgery?	○ Known○ Unknown
COVID-19 status at time of surgery	PositiveNegative
Was COVID-19 status newly assessed at time of surgery?	Yes No No
How was Covid Status newly assessed at time of surgery?	☐ Swab test ☐ CXR ☐ CT



11-01-2021 11:41

What was the result of COVID-19 swab test at time of surgery?	PositiveNegativePending
Date of swab-test at time of surgery	
What was the result of CXR test for COVID-19 at time of surgery?	PositiveNegativePending
Date of CXR at time of surgery	
What was the result of CT test for COVID-19 at time of surgery?	PositiveNegativePending
Date of CT at time of surgery	
Date and Time of Decision to operate	
Surgery Data	
Urgency when listed for surgery	 Immediate (< 2 hours) Urgent (2-6 hours) Urgent (6-18 hours) Expedited (>18 hours)
Did the patient undergo a surgical intervention?	○ Yes ○ No
TNM at time of surgery if different from original staging at time of MDT/presentation	
Date and time of entry into operating theatre/anaesthetic room	(Please complete time to best of your ability.)
Delay to surgery	
Reason for delay if > 36 hours	 Not fit for surgery Theatre capacity Anticoagulation COVID test pending Other
Other reason for delay > 36 hours	
Date of surgery	

Surgical Approach	OpenLaparoscopicLap AssistedHybridOther
Grade of Primary surgeon	 Consultant/Attending surgeon Senior Fellow Specialist Registrar/Resident surgeon Core Trainee Foundation Year doctor/Intern Medical student Advanced Surgical Nurse Practitioner Other
Other Primary surgeon	
Grade of Secondary surgeon	 Consultant/Attending surgeon Senior Fellow Specialist Registrar/Resident surgeon Core Trainee Foundation Year doctor/Intern Medical student Advanced Surgical Nurse Practitioner Other
Other Secondary surgeon	
Grade of Anaesthetist	 Consultant/Attending Anaesthesiologist Senior Fellow Specialist Registrar/Resident Anaesthesiologist Core Trainee Foundation Year doctor/Intern Advanced Surgical Nurse Practitioner Other
Was planned procedure performed?	
Reason for unplanned procedure	☐ Covid-related decision☐ More advanced disease than expected☐ Other
Other reason for unplanned procedure	

Emergency Surgery	 Abscess drainage Appendicectomy Cholecystectomy Peptic ulcer repair Small bowel resection Colectomy Hartmann's Hernia repair Diagnostic procedure Laparoscopic washout Laparoscopy revealing O&G pathology
Colorectal surgery	ColectomyAnterior resectionAP resectionPelvic exentration
Oesophagogastric surgery	 Oesophagectomy Total Gastrectomy Partial gastrectomy Anti-reflux or hiatal procedure Myotomy
HPB surgery	Liver resectionWhipple procedureDistal pancreatectomyCholecystectomy
Planned Thyroid procedure	Total thyroidectomyHemithyroidectomyIsthmusectomyThyroglossal cyst excision
Unplanned Thyroid procedure performed	○ Total thyroidectomy○ Hemithyroidectomy○ Isthmusectomy○ Thyroglossal cyst excision
Nodal procedure planned	Yes - central compartment dissectionYes - lateral compartment dissectionNo
Unplanned Nodal procedure performed	Yes - central compartment dissectionYes - lateral compartment dissectionNo
Planned Parathyroid procedure	Focused surgeryBilateral exploration
Planned Hemithyroidectomy	○ Yes ○ No
Unplanned Parathyroid procedure	☐ Focused surgery ☐ Bilateral exploration
Unplanned hemithyroidectomy	○ Yes ○ No



Planned Adrenal procedure	○ Right○ Left○ Bilateral
Planned Adrenal approach	OpenTransperitoneal laparoscopicRetroperitoneal laparoscopic
Unplanned Adrenal approach	OpenTransperitoneal laparoscopicRetroperitoneal laparoscopic
Nerve monitor used	○ Yes ○ No
Reason for unplanned procedure	Covid-related decisionDisease more advanced than anticipatedLoss of nerve monitor signalOther
Reason for unplanned procedure	Covid-related decisionDisease more advanced than anticipatedBleedingSize of tumourOther
Other reason for unplanned procedure	
Bariatric Surgery	○ RYGB○ Sleeve○ Band
Amputation	○ Major○ Minor
Lower Limb Revascularisation	EndovascularOpenHybrid

T&O interventions	☐ Manipulation/Exploration under anaesthesia ☐ Arthroscopy ☐ Open reduction and internal fixation ☐ Intramedullary nail ☐ Hemiarthoplasty ☐ Total Arthroplasty ☐ Amputation ☐ Arthrodesis/Fusion ☐ Soft tissue repair/reconstruction ☐ Incision/drainage/debridement/washout ☐ External fixation ☐ Traction ☐ Plaster Immobilisation ☐ Open reduction ☐ Revisional surgery ☐ Decompression/Fasciotomy Other
Revisional Surgery	 Revision arthroplasty Revision Internal fixation Revision Intramedullary nailing 1st Stage revision Arthroplasty Other
Fracture Neck of Femur Operation	☐ Cannulated hip screw ☐ DHS ☐ Intramedullary nail ☐ Hemiarthroplasty ☐ Total Hip replacement ☐ Other
Other T&O procedure	
AAA	○ EVAR○ Complex EVAR○ Open
TAAA	○ EVAR○ Complex EVAR○ Open
Aortic dissection	EndovascularOpenHybrid
Thoracic procedure	 □ Wedge Resection □ Segmentectomy □ Lobectomy □ Pneumonectomy □ Resection of Mediastinal Mass □ Pleurectomy/Decortication □ Extended Pleurectomy/Decortication □ Bullectomy & Pleural Symphysis □ Pleural Biopsies □ Airway Debulking / Stenting □ Other



Other Thoracic procedure	
Access	 Sternotomy Mini-Sternotomy Thoracotomy Video Assisted Thoracoscopic surgery Robotic Assisted Thoracoscopic Surgery Rigid Bronchoscopy Flexible Bronchoscopy down Endotracheal Tube Other
Access	 Sternotomy- Full Sternotomy- Partial/Mini Anterior thoracotomy Posterior thoracotomy Video assisted Robotic Other
Cardiopulmonary bypass	○ Yes ○ No
Myocardial protection	Beating HeartFibrillationCardioplegia
Lowest temperature	
Circulatory arrest	○ Yes ○ No
Cardiac Procedure	☐ CABG ☐ Aortic Valve repair or replacement ☐ Mitral Valve repair or replacement ☐ Tricuspid valve repair or replacement ☐ Thoracic Aorta procedure ☐ Procedure for Atrial Fibrillation ☐ Other
Left Main Stem disease	○ Yes ○ No
Grafted vessels	 □ LAD - Left Anterior Descending artery □ OM - Obtuse Marginal artery □ PDA - Posterior Descending artery □ RCA - Right Coronary artery □ Intermediate artery □ Diagonal artery
Left Anterior Descending graft	□ LIMA□ RIMA□ LSV□ Radial

Obtuse marginal graft	○ LIMA○ RIMA○ LSV○ Radial
Posterior descending artery graft	○ LIMA○ RIMA○ LSV○ Radial
Right coronary artery graft	○ LIMA○ RIMA○ LSV○ Radial
Intermediate artery graft	○ LIMA○ RIMA○ LSV○ Radial
Diagnonal artery graft	○ LIMA○ RIMA○ LSV○ Radial
Aortic Valve	○ Repair○ Tissue replacement○ Mechanical replacement
Mitral Valve	RepairTissue replacementMechanical replacement
Tricuspid Valve	RepairTissue replacementMechanical replacement
Aortic segment replaced - select all that apply	☐ Ascending☐ Hemi arch☐ Arch☐ Descending thoracic
Procedure for AF	☐ Ablation☐ Left atrial appendage occlusion☐ Other
Other procedure for AF	
Other Cardiac Procedure	
Anaesthesia	○ General Anaesthesia○ General + Regional Anaesthesia○ Regional Anaesthesia○ Local Anaesthesia

Number of intended procedures	
Including this operation, how many operations has the patient had in the 30 day period prior to this procedure?	○ 1 ○ 2 ○ >2
Estimated blood loss (mls)	<pre></pre>
Estimated contamination if applicable	○ None○ Serous fluid○ Localised pus○ Free bowel content, pus or blood
Malignancy at time of surgery	○ None○ Primary only○ Nodal metastases○ Distant metastases○ Unknown
Thoracic pathology	 Benign Malignant - Lung Malignant - Pleural Malignant - Secondary Other
Other thoracic pathology details	
Operative Severity Moderate Includes appendicectomy Cholecystectomy Mastectomy TURP Major All colonic resections (excluding colostomy alone) All gasterectomy (but not repair perforated or bleeding ulcer Small bowel tumour resection Re-operations for ongoing sepsis or bleeding Laparostomy Intestinal bypass Major+ All other procedures including: Stoma formation Small bowel resection Division adhesions Repair perforated or bleeding ulcer	Minor Moderate Major Major+

Patient Details
Date of Birth[pres_dob]
Gender[pres_gen]



Outcome

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.	
PanSurg-Predict Database Patient Outcome	
Patient Details Date of Birth[pres_dob] Gender[pres_gen]	
COVID-19	
COVID-19 swab testing during the patient's presentation was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 CXR scan assessment during the patient's presentation was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 computerised tomography scan assessment during the patient's presentation was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 swab testing during the patient's evaluation of operative management was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 CXR scan assessment during the patient's evaluation of operative management was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 computerised tomography scan assessment during the patient's evaluation of operative management was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 swab testing during at the time of the patient's surgery was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 swab testing during at the time of the patient's surgery was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
COVID-19 swab testing during at the time of the patient's surgery was recorded as pending. Has the result been processed by the time of discharge?	Pending result is now positivePending result is now negativeResult is still pending
ICII	

ICU



ICU stay	Yes plannedYes unplannedNo
Has the patients Covid Status affected decision to admit to ICU?	Yes No
Has surgical department capacity affected decision to admit to ICU?	Yes No
Reason for ICU stay	☐ COVID related☐ Post-Operative support☐ Other
Length of ICU stay	
	(nights)
Did the patient return to ICU?	○ Yes ○ No
Has the patients Covid Status affected decision to readmit to ICU?	
Has surgical department capacity affected decision to readmit to ICU?	
Reason for return to ICU	○ COVID related○ Post-Operative support○ Other
Length of returning ICU stay	
	(nights)
Complications	
Return to theatre	Yes - unplannedYes - plannedYes - unplanned AND plannedNoUnknown
Date of Return to Theatre	

T&O Return to Theatre	 ☐ Haemorrhage ☐ Sepsis/Infection/Abscess ☐ Failure of fixation ☐ Periprosthetic fracture ☐ VTE ☐ Wound problems ☐ Neurovascular injury ☐ Dislocation ☐ Compartment syndrome ☐ Deteriorating patients ☐ Other
Other Return to theatre	
Reason for unplanned return to theatre	 Anastomotic leak Abscess Bleeding or Haematoma Decompression of abdominal/other compartment syndrome Bowel obstruction Abdominal wall dehiscence Accidental damage to bowel or other organ Stoma viability or retraction Ischaemia / non-viable bowel Sepsis / infection / inadequate source control Deteriorating patient Missed pathology at first laparotomy Other Unknown ((Select most significant reason))
Reason for planned return to theatre	 Removal of packs / ensure haemostasis/ washout Closure of laparostomy Removal of bogota bag / formation of formal laparostomy with mesh / vac dressing insertion Definitive procedure following 'damage control surgery' +/- stoma formation, +/- restoration of intestinal continuity Assess viability of GI tract, +/- stoma formation, +/- restoration of intestinal continuity Other Unknown ((Select most significant reason))
Reason for return to theatre	

General complications	 None Myocardial infarction Pulmonary embolism Respiratory complications/Lower respiratory tract infection Deep Venous thrombosis Cerebral Vascular Accident/Strokes Hospital Acquired COVID Community Acquired COVID Haematoma Ileus Urinary retention Surgical Site Infection AF Re-intubation NIV Acute Kidney injury Dialysis Intra-aortic baloon pump Mechanical cardiac support Other
Other surgical complication	
Other thoracic complications	☐ Pneumonia ☐ Atelectasis ☐ Pleural Effusion ☐ ARDS ☐ None
COVID-related respiratory complication	○ Yes ○ No
Endocrinology Complications	☐ Hypocalcaemia ☐ Tracheostomy ☐ Voice change ☐ Other ☐ None
Was patient treated for hypocalcaemia?	○ Yes ○ No
Post-operative Vocal Cord check	Not performed☐ Abnormal☐ Normal
Re-intervention (endoscopic or radiological)	○ Yes ○ No
Re-intervention details	
Was bone protection medication started during admission?	YesNot requiredPending further testsPatient already on treatmentOther

Was patient mobilised on the first post-operative day?	○ Yes ○ No	
Was a delirium assessment completed both pre- and post-operatively?	○ Yes ○ No	
Histopathology		
Thyroid histopathology	 Colloid goitre Colloid nodule Simple cyst Follicular adenoma Oncocytic adenoma FTC Oncocytic carcinoma PTC MTC Anaplastic Lymphoma Metastatic C-cell hyperplasia Graves' disease Auto-immune thyroiditis Other (Specify) 	
Other thyroid histopathology		
Parathyroid histopathology	○ Adenoma○ Hyperplasia○ Cancer○ Uncertain○ Other (Specify)	
Other parathyroid histopathology		
Adrenal histopathology	 ○ Adenoma benign ○ Adenoma indeterminate ○ Adrenocortical carcinoma ○ Adrenal hyperplasia ○ Phaeochromocytoma ○ Metastases ○ Other (Specify) 	
Other adrenal histopathology		
TNM Classification		
Loco-regional residual tumour after resection	○ R0 ○ R1 ○ R2 ○ Rx	
Outcome		



Patient outcome	DischargeIn hospital mortalityStill in hospital	
Date of discharge		
Date of mortality		
Discharge destination	○ Usual place of residence○ Rehabilitation facility○ Other hospital○ Intermediate care○ Other	
Primary cause of death	○ COVID related○ Not COVID related	
Primary cause of death		
COVID-19 status at discharge		
Known COVID-19 Status at time of discharge	○ Known○ Unknown	
COVID-19 status at time of discharge	○ Positive○ Negative	
Was COVID-19 status newly assessed at discharge?	○ Yes ○ No	
How was Covid Status newly assessed at time of discharge?	☐ Swab test ☐ CXR ☐ CT	
What was the result of COVID-19 swab test at time of discharge	PositiveNegativePending	
Date of swab-test at discharge		
What was the result of CXR test for COVID-19 at time of discharge	PositiveNegativePending	
Date of CXR at discharge		
What was the result of CT test for COVID-19 at time of discharge	○ Positive○ Negative○ Pending	



Date of CT at discharge	
	

Patient Details Date of Birth[pres_dob] Gender[pres_gen]



Follow up

Record ID. Please record this number on your local in house file with associated local record number so that you may return to complete data collection later.		
Follow up	Yes - plannedYes - unplannedNo - not plannedNo - lost to follow up	
Date of Follow up		
Re-admission related to original surgical pathology		
Did patient acquire COVID-19 infection between hospital discharge and the first outpatient clinic?	○ Yes ○ No	
Did patient require admission due to COVID-19 infection since discharge?	○ Yes ○ No	
Did patient require Intensive Care admission due to COVID-19 infection since discharge?	○ Yes ○ No	
Vocal Cord check	☐ Not performed☐ Abnormal☐ Normal	
Is the patient on T3 or T4?	○ Yes ○ No	
Is the patient taking Vitamin D or Calcium supplements in order to maintain normocalcaemia at 6 months?	○ Yes ○ No	
Persistent Hypercalcaemia	○ Yes ○ No	



Supplement 4. Table of contributing teams and respective numbers of emergency patients entered.

Centre Name	Country	N	% of Cases
Department of General and Vascular Surgery, St Mary's Hospital, Imperial College Healthcare NHS Trust, London.	United Kingdom	826	26.01
Department of Trauma and Orthopaedics, Queen Elizabeth Hospital, Gateshead Health NHS Foundation Trust, Gateshead.	United Kingdom	285	8.97
Department of Gastrointestinal surgery, Southmead Hospital, North Bristol NHS Trust, Bristol.	United Kingdom	182	5.73
Department of General Surgery, Charing Cross Hospital, Imperial College Healthcare NHS Trust, London.	United Kingdom	175	5.51
Department of General Surgery, University Hospital Galway, Galway.	Republic of Ireland	128	4.03
Department of General Surgery, Royal Derby Hospital, University Hospitals Of Derby And Burton, Derby.	United Kingdom	114	3.59
Department of General Surgery, St George's Hospital, St George's University Hospital NHS Foundation Trust, London.	United Kingdom	107	3.37
Department of Upper Gastrointestinal Surgery, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam.	The Netherlands	104	3.27
Department of Trauma and Orthopaedic Surgery, Chelsea and Westminster Hospital NHS Foundation Trust, London.	United Kingdom	95	2.99
Department of Orthopaedic Surgery, Hillingdon hospital, Hillingdon Hospitals NHS Foundation Trust, London.	United Kingdom	91	2.86
Department of General surgery, Worthing Hospital, Western Sussex Hospitals NHS Foundation Trusts, Worthing.	United Kingdom	87	2.74
Carol Davila University of Medicine and Pharmacy, Bucharest, Department of General Surgery, Emergency Clinic Hospital of Bucharest, Bucharest	Romania	86	2.71
Department of General Surgery, St Peter's Hospital, Ashford and St Peter's Hospitals NHS Foundation Trust, Chertsey.	United Kingdom	84	2.64
Department of Hepatopancreaticobiliary Surgery, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge.	United Kingdom	78	2.46
Department of General Surgery, East Surrey Hospital, Surrey and Sussex Healthcare NHS Trust, London.	United Kingdom	77	2.42
Department of General Surgery, Whittington Hospital, Whittington Health NHS Trust, London.	United Kingdom	72	2.27
Department of General and Colorectal Surgery, QEQM Margate, East Kent Hospitals University NHS Foundation Trust, Margate.	United Kingdom	61	1.92
Department of Trauma and Orthopaedic Surgery, Ibrahim Malik Teaching Hospital, Khartoum.	Sudan	58	1.82
Department of Trauma and Orthopaedics, St Mary's Hospital, Imperial College Healthcare NHS Trusts, London.	United Kingdom	54	1.70
Department of Emergency and General Surgery, Royal Cornwall Hospitals NHS Trust, Truro.	United Kingdom	52	1.64
Department of General Surgery, Birmingham Heartlands Hospital, Birmingham.	United Kingdom	40	1.26
Department of General Surgery, University of Ilorin Teaching Hospital, Ilorin.	Nigeria	36	1.13
Department of General Surgery, University Hospital Lewisham, Lewisham and Greenwich NHS Trust, London.	United Kingdom	35	1.10
Department of General Surgery, University College Hospital, University College London Hospitals NHS Foundation Trust, London.	United Kingdom	27	0.85
Department of Emergency Surgery, Stoke Mandeville Hospital, Buckinghamshire Healthcare NHS Trust, Aylesbury.	United Kingdom	27	0.85
Department of General Surgery, Sher I Kashmir Institute of Medical Sciences, Srinagar.	India	21	0.66
Department of Hepatopancreaticobiliary Surgery, Hammersmith Hospital, Imperial College Healthcare NHS Trusts, London.	United Kingdom	18	0.57

Department of General Surgery, Afe Babalola University Multisystem Hospital (ABUAD), Ado-Ekiti.	Nigeria	13	0.41
Department of General Surgery, University Hospital Limerick, Limerick.	Republic of Ireland	13	0.41
Department of Surgery, Gazi University Faculty of Medicine, Ankara.	Turkey	11	0.35
Department of General Surgery, Aseer Central Hospital, Abha City.	Saudi Arabia	11	0.35
First Department of Surgery, Semmelweis University, Budapest.	Hungary	10	0.31
Department of Surgery, Colchester General Hospital, East Suffolk and North Essex NHS Foundation Trust, Colchester.	United Kingdom	9	0.28
Department of Vascular Surgery, University Hospital Galway, Galway.	Republic of Ireland	9	0.28
Department of General Surgery, Royal North Shore Hospital, St Leonards.	Australia	8	0.25
Department of Surgery, Saint Savvas Cancer Hospital, Athens.	Greece	7	0.22
Department of Trauma and Orthopaedics, Lady Reading Hospital, Peshawar.	Pakistan	7	0.22
Department of General Surgery, Azienda Unità Sanitaria Locale Ferrara – Università di Ferrara, Ferrara.	Italy	6	0.19
Department of Surgery, AZ Rivierenland Hospital, Bornem.	Belgium	5	0.16
2nd Department of Surgery, Athens Naval and Veterans Hospital, Athens, Greece.	Greece	5	0.16
Department of Pleural and peritoneal Surgery, Northumbria Specialist Emergency Care Hospital, Northumbria Healthcare NHS Foundation Trust, Newcastle upon Tyne.	United Kingdom	5	0.16
Department of General Surgery, Royal Free Hospital, Royal Free London NHS Foundation Trust, London.	United Kingdom	5	0.16
Department of General Surgery, Samsun Training and Research Hospital, Samsun.	Turkey	5	0.16
Department of General surgery, Kanuni Sultan Süleyman Training and Research Hospital, Istanbul.	Turkey	4	0.13
Department of Endocrine Surgery, Churchill Hospital, Oxford University Hospitals NHS Foundation Trust, Oxford.	United Kingdom	4	0.13
Department of Upper Gastrointestinal Surgery, Humanitas Clinical and Research Center IRCCS, Humanitas University, Milano.	Italy	4	0.13
Department of General Surgery, Hospital General Universitario Morales Meseguer, Murcia.	Spain	3	0.09
Department of Endocrine Surgery, Royal North Shore Hospital, St Leonards.	Australia	3	0.09
First Department of Surgery, Laiko General Hospital, National and Kapodistrian University of Athens, Athens.	Greece	2	0.06
Department of Trauma and Orthopaedic Surgery, Whipps Cross Hospital, Barts Health NHS Trust, London.	United Kingdom	2	0.06
Department of Paediatric Orthopaedic surgery, Starship Child Health, Auckland.	New Zealand	1	0.03
Department of Surgery, Damietta Specialized Hospital, Damietta, Egypt.	Egypt	1	0.03
Department of Thoracic Surgery, Glenfield General hospital, University Hospital of Leicester NHS Trust, Leicester.	United Kingdom	1	0.031
Department of Endocrine Surgery, Hammersmith Hospital, Imperial College Healthcare NHS Trust, London	United Kingdom	1	0.031
Department of Colorectal Surgery, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam.	The Netherlands	1	0.031