EBI Program

EDWARD Business Implementation Program

Statewide Reporting Framework

February 2014

ED Master Class

EBI Program

NSW GOVERNMENT Health

Agenda

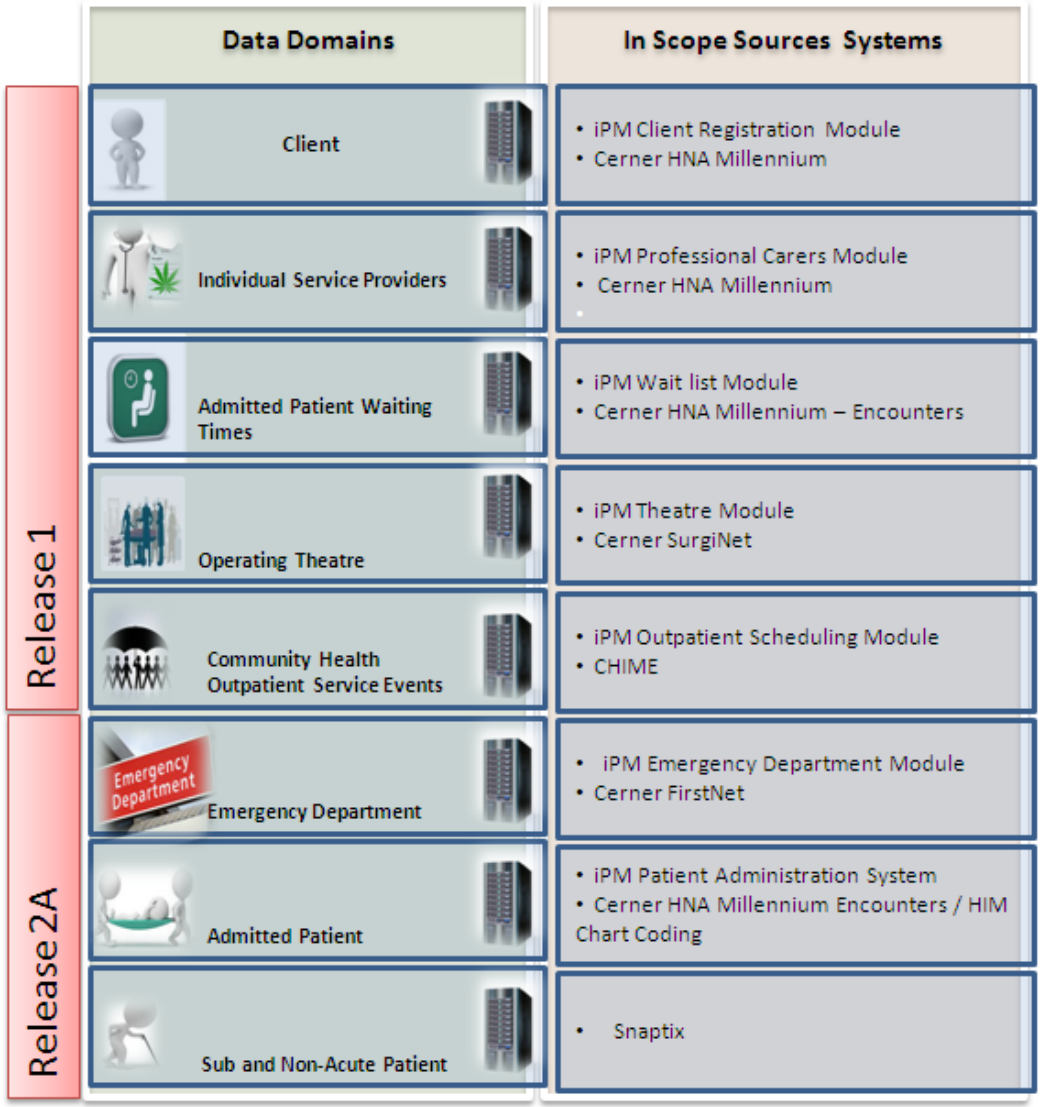
1. EDWARD Existing Phase 1/2 Platform & Data
2. EBI Program Mandate
3. Benefits
4. Statewide Reporting Framework – overview
   - State → LHD → facility
   - Scorecards → dashboards → operational reports
5. Demonstration of the Delivery Platform
   1. KPI Scorecards, Summary Reports, Trend Pages
   2. KPI Dashboards, Activities Summaries (OT)
   3. Operational Reports
6. Business Decision Methodology – overview
7. ED status
8. Next Steps

EBI Program

NSW GOVERNMENT Health

EDWARD – Existing Data Domains & Source Systems Phase 1

EBI Program



Note: Although not shown above Organisation Service Provider is in Scope and available in EDWARD

NSW GOVERNMENT Health

EDWARD – Data Domains in Scope for Phase 2

EBI Program

Business Information (BI) Business Case – Phase 2

Data Domains	In Scope Sources Systems
Admitted Patient Private Sector	• ISCOS (to be replaced by PHISCO)
Admitted Patient Interstate	• Interstate X Flows
Radiotherapy waiting times	• VARIS - Legacy • LANTIS - Legacy • ARIA (C) • Mosaiq (C)
Non-admitted Patient Cancer Notifications	• VARIS - Legacy • LANTIS - Legacy • ARIA (C) • Mosaiq (C)
NSW Ambulance Services	• NSW Ambulance CAD System(S) • PHCRS/ PBRC
Mental Health	• SCI-MHOAT • FISCHE
Drug and Alcohol	• Matisse
Finance	• SMRT (Oracle Financials)
Human Resource	• Oracle HR • MicrOpay • Supero (C) • Stafflink
Midwives / Birth Defects / Birth Notification	• ObstetriX • MDCOS
Visiting Medical Officer	• VMONEY
Ancillary Services Pathology	• Cerner PathNet (S)
Ancillary Services Radiology	• PACS-RIS • Cerner RadNet
Ancillary Services Pharmacy	• Cerner PharmNet • iPharmacy (S)
Death Notification	• Austrailan Bureau of Statistics Deaths Coded Data Set • NSW Births, Deaths and Marriages
Unique Patient Identifier	•Enterprise Patient Registry (EPR) • SUPI (for MHUPI)
Allied Health	•AHMIS
Community Health	•CERNER

NSW GOVERNMENT Health

Benefits of EDWARD and EBI Reports

EBI Program

Current Reporting	EBI Reports	Benefits of EBI reports
Different practices at LHD	One consistent set of **practices**	**A common performance dialogue, identification and leveraging of 'Best Practice' including institution of common processes across all of Health**
Different sources of data for reporting	One consistent set of **data** for reporting	**Can compare** across the whole of NSW Health
Differing reporting capability, capacity and offerings at each LHD	A single set of **reports** suitable for all LHDs	**Comparison across the whole of NSW Health, economies of scale and making new capability available for some LHDs**
Different and unclear interpretation of business rules and how to report by each LHD	A single set of transparent **business rules**	**Transparency** across the whole of NSW Health
Duplication of effort at each LHD	A **single build** / maintenance effort	**Economies of scale** and **consistency**
Reinterpretation of LHD data at MoH	**No reinterpretation** required	**Analysts can move from data gathering mode to problem solving / Analysis mode**
Most reporting is static for frontline staff (printouts, PDFs)	Interactive inquiry tool facilitates **dynamic** investigation capability	**Enable frontline staff to move from static to dynamic information and the provision of an operational path way to effect KPIs**
Aggregated Data	Unit level data	Greater ability for analysis and root cause determination
HIEs have reached end of life	EDWARD is a highly scalable single instance Data Warehouse that will follow Microsoft's product lifecycle	(Decommission of HIE)

EBI Program Mandate

EBI Program

The EDWARD Business Implementation (EBI) Program is mandated to provide a baseline of ***standard operationally focussed reports*** for NSW Health Local Health Districts (LHDs) to aid LHDs in running their business by providing a single source of truth across all of NSW Health around ***performance information*** for Wait List (WL), Emergency Department (ED) and Operating Theatre….

….*when it is needed, in the format it is needed in, and in a quality, accurate manner.*

NSW GOVERNMENT Health

EBI Program Statewide Reporting

1. Conceptual framework

2. Demonstration

EBI Program

NSW GOVERNMENT Health

EDWARD – Statewide Reporting Framework

NSW GOVERNMENT Health

INTEGRATED REPORTING
DELIVERY PLATFORM

KPI
SCORECARDS
Trend Graphs, Listing Reports, Sparklines

KPI & Point of Interest
DASHBOARDS
& Activities Summaries - Data visualisation highlighting key information

OPERATIONAL REPORTS
Detail including unit record (patient) data

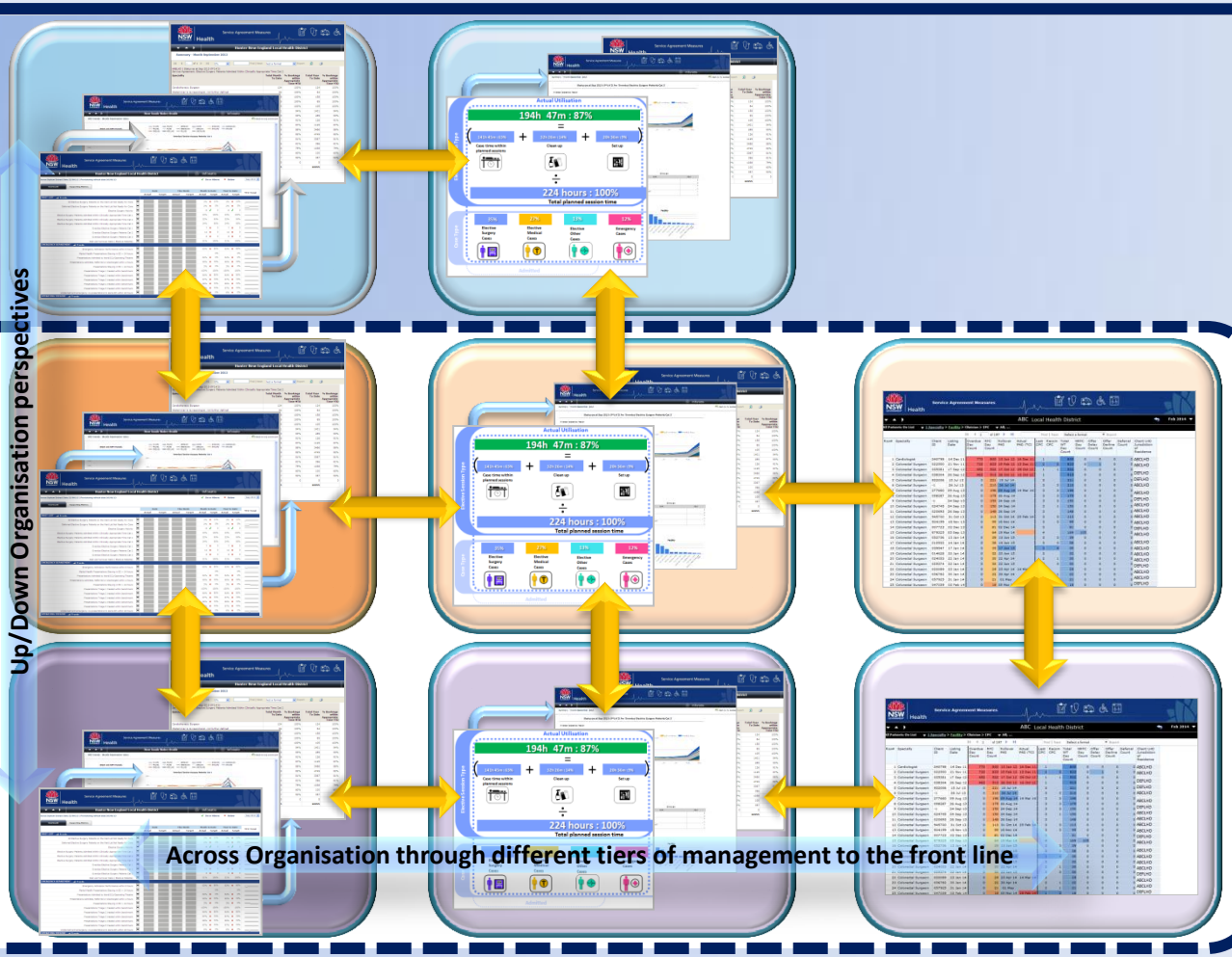
ORGANISATION PERSPECTIVE

State

LHD

Facility
& Service Unit

Up/Down Organisation perspectives



Across Organisation through different tiers of management to the front line

EBI Program– Business Decision Methodology

1. Conceptual framework - Maps, Paths, and Steps
2. System Prototype Walkthrough

Business Decision Methodology - Walkthrough

EBI Program

The following ‘walkthrough’ is a *draft* concept paper of how the **Business Decision Methodology** will operate.

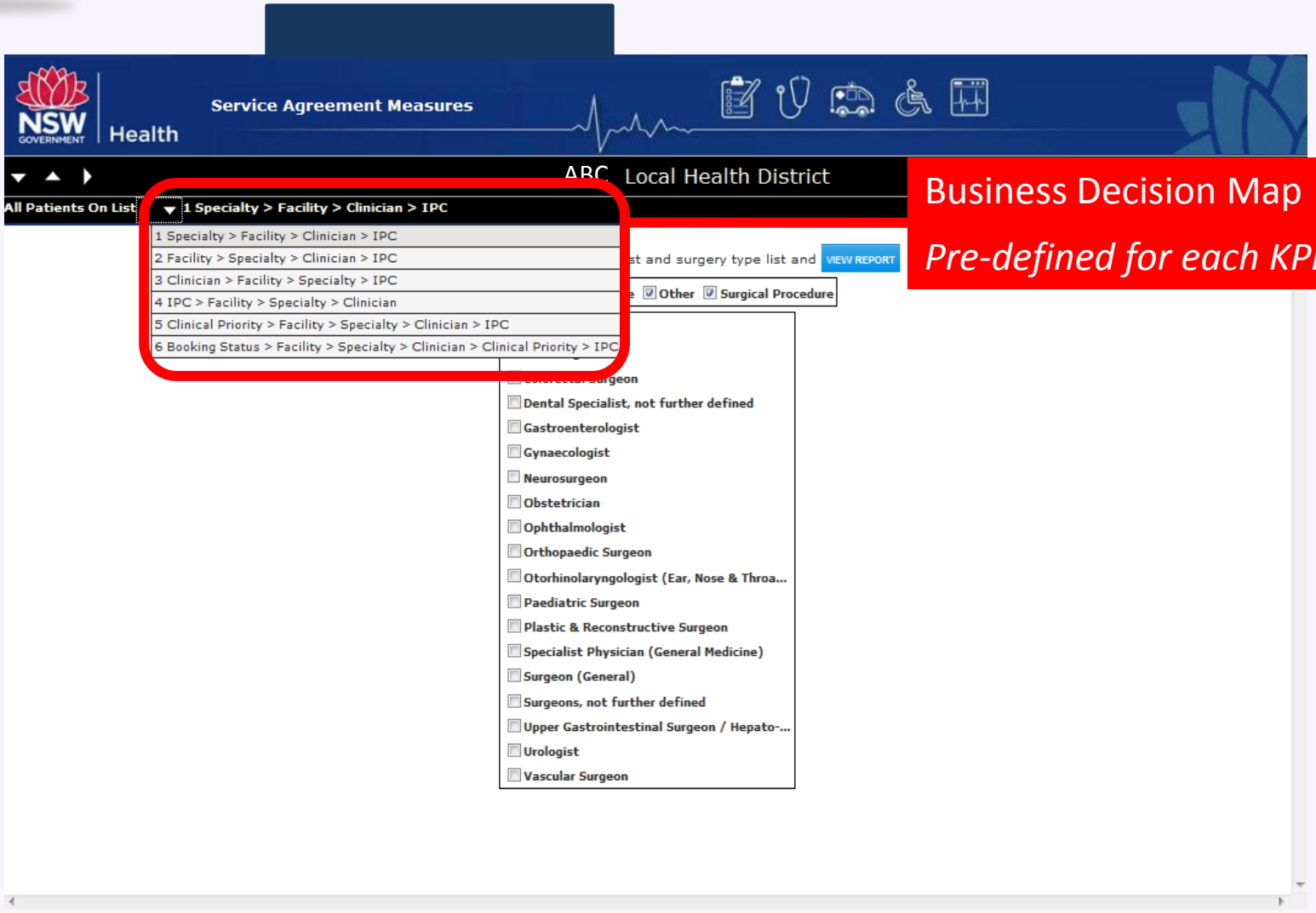
The visual display is intended to give an idea of the functionality, ***not*** how the final solution will look and feel.

NSW GOVERNMENT Health

EDWARD – LHD/Facility Operational Reports

Step 1

Example of Business Decision Methodology enabling **dynamic investigation**



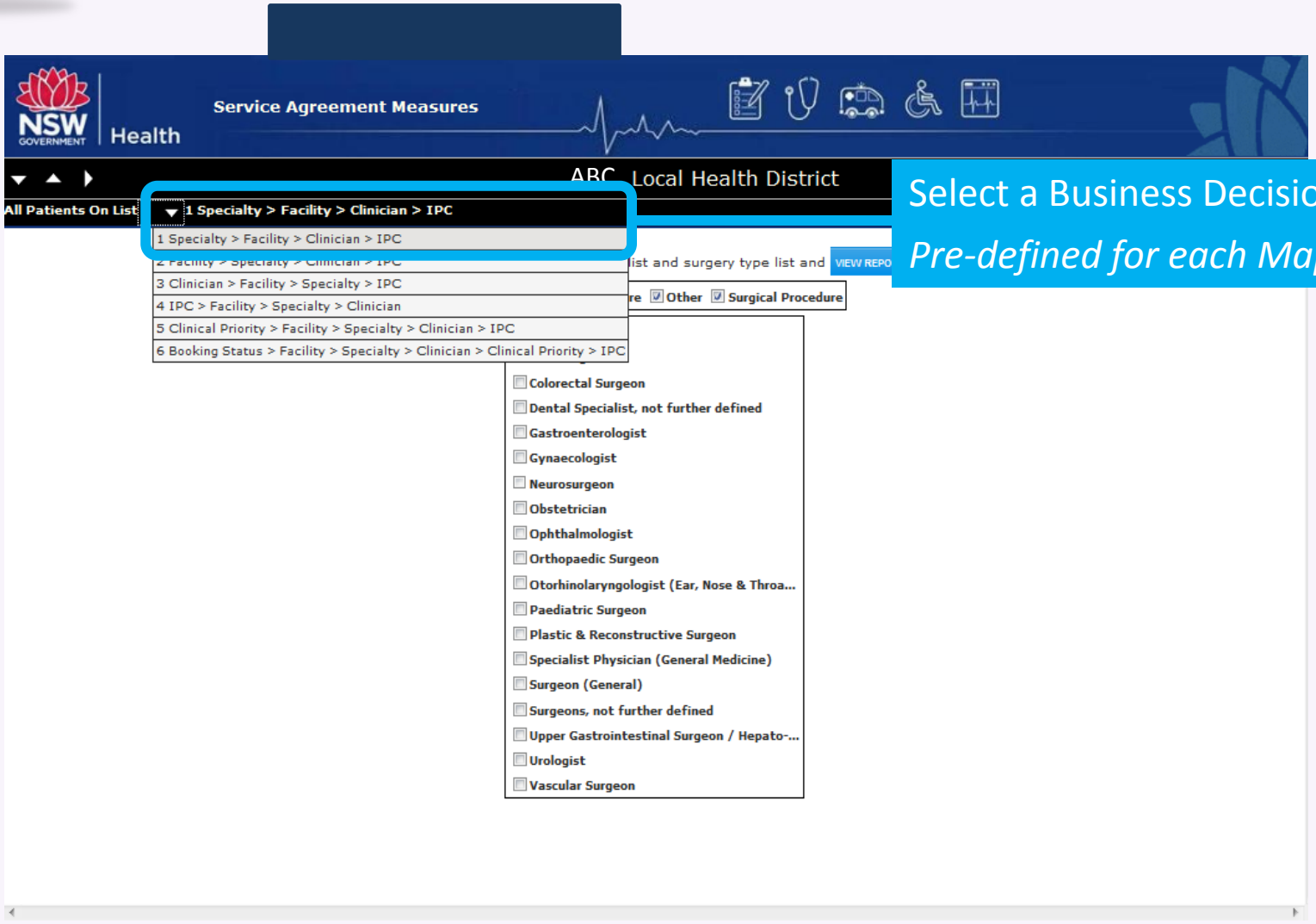
Business Decision Map

Pre-defined for each KPI

EDWARD – LHD/Facility Operational Reports

Step 2

Example of Business Decision Methodology enabling **dynamic investigation**



Select a Business Decision Path

Pre-defined for each Map

EDWARD – LHD/Facility Operational Reports

Step 3 Example of Business Decision Methodology enabling **dynamic investigation**

NSW GOVERNMENT Health — Service Agreement Measures

ABC Local Health Distr

All Patients On List | 1 Specialty | Facility | Clinician > IPC | All, ...

1 of 197 Find | Next Select

Select *next* Business Decision **Step**

Row#	Specialty	Client ID	Listing Date	Overdue Day Count	RFC Day Count	Rollover PAD	Actual PAD /TCI	Last CPC	Recom CPC	Total WT Day Count	Day Count	Delay Count	Decline Count	Count	Jurisdiction of Residence
1	Cardiologist	040798	14 Dec 11	770	800	13 Jan 12	16 Dec 11	1		800	0	0	0	0	ABCLHD
2	Colorectal Surgeon	022500	21 Nov 11	733	823	19 Feb 12	13 Dec 11	2	3	823	0	1	0	0	ABCLHD
3	Colorectal Surgeon	035381	17 Sep 12	492	522	17 Oct 12	09 Oct 12	1	1	522	0	0	0	0	
4	Colorectal Surgeon	038304	26 Sep 12	483	513	26 Oct 12	16 Oct 12	1		513	0	0	0	0	DEFLHD
5	Colorectal Surgeon	932006	15 Jul 13	0	221	15 Jul 14		3		221	0	0	0	0	DEFLHD
6	Colorectal Surgeon	-1	26 Jul 13	0	210	26 Jul 14		3	3	210	0	0	0	0	ABCLHD
7	Colorectal Surgeon	277660	09 Aug 13	0	196	09 Aug 14	14 Mar 14	3	3	196	0	0	0	0	
8	Colorectal Surgeon	058287	26 Aug 13	0	179	26 Aug 14		3	3	179	0	0	0	0	ABCLHD
9	Colorectal Surgeon	-1	24 Sep 13	0	150	24 Sep 14		3	3	150	0	0	0	0	DEFLHD
10	Colorectal Surgeon	024745	24 Sep 13	0	150	24 Sep 14		3	1	150	0	0	0	0	ABCLHD
11	Colorectal Surgeon	020893	26 Sep 13	0	148	26 Sep 14		3		148	0	0	0	0	ABCLHD
12	Colorectal Surgeon	945700	31 Oct 13	0	113	31 Oct 14	25 Feb 14	3	3	113	0	0	0	0	ABCLHD
13	Colorectal Surgeon	504199	18 Nov 13	0	95	18 Nov 14		3	3	95	0	0	0	0	ABCLHD
14	Colorectal Surgeon	007723	02 Dec 13	0	81	02 Dec 14		3		81	0	0	0	0	DEFLHD
15	Colorectal Surgeon	879325	05 Sep 13		64	19 Mar 14		4		169	105	0	0	0	ABCLHD
16	Colorectal Surgeon	052736	13 Jan 14	0	39	13 Jan 15		3	3	39	0	0	0	0	
17	Colorectal Surgeon	010932	14 Jan 14	0	38	14 Jan 15		3	3	38	0	0	0	0	ABCLHD
18	Colorectal Surgeon	039947	17 Jan 14	0	35	17 Jan 15		3	4	35	0	0	0	0	ABCLHD
19	Colorectal Surgeon	014628	20 Jan 14	0	32	20 Jan 15		3		32	0	0	0	0	ABCLHD
20	Colorectal Surgeon	024053	22 Jan 14	0	30	22 Apr 14		2	1	30	0	0	0	0	ABCLHD
21	Colorectal Surgeon	025374	22 Jan 14	0	30	22 Jan 15		3	3	30	0	0	0	0	DEFLHD
22	Colorectal Surgeon	020089	23 Jan 14	0	29	23 Apr 14	14 Mar 14	2		29	0	0	0	0	ABCLHD
23	Colorectal Surgeon	036782	30 Jan 14	0	22	30 Apr 14		2	1	22	0	0	0	0	ABCLHD
24	Colorectal Surgeon	057925	31 Jan 14	0	21	01 May		2	1	21	0	0	0	0	DEFLHD
25	Colorectal Surgeon	047039	03 Feb 14	0	18	05 Mar 14	18 Feb 14	1	2	18	0	0	0	0	

EDWARD – LHD/Facility Operational Reports

Step 4 Example of Business Decision Methodology enabling **dynamic investigation**

NSW GOVERNMENT Health — Service Agreement Measures

ABC Local Health Distr

All Patients On List ▼ 1 Specialty > Facilit > Clinician > PC ▼ All, ...

Select *next* Business Decision **Step**

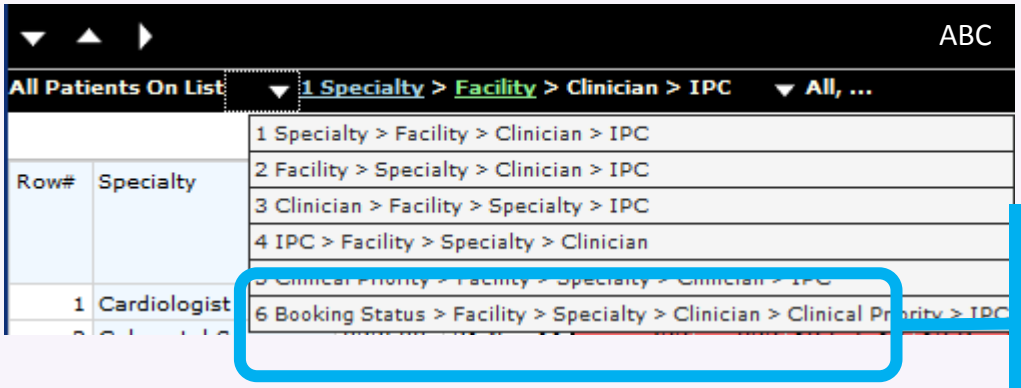
1 of 197 Find | Next Select

Row#	Specialty	Facility	Client ID	Listing Date	Overdue Day Count	RFC Day Count	Rollover PAD	Actual PAD /TCI	Last CPC	CPC	WT Day Count	Day Count	Delay Count	Decline Count	Count	Jurisdiction of Residence
1	Otorhinolaryngologi	Hilltop Hosp	895336	18 Sep 12	491	521	18 Oct 12	16 Oct 12	1	2	521	0	0	0	0	ABCLHD
2	Otorhinolaryngologi	Hilltop Hosp	019641	22 Nov 11	457	822	21 Nov 12	16 Oct 12	3	3	822	0	0	0	0	ABCLHD
3	Otorhinolaryngologi	Hilltop Hosp	063416	31 Aug 12	449	539	29 Nov 12	16 Oct 12	2	2	539	0	0	0	0	
4	Otorhinolaryngologi	Hilltop Hosp	848825	28 Mar 12	330	695	28 Mar 13	16 Oct 12	3	3	695	0	0	0	0	DEFLHD
5	Otorhinolaryngologi	Hilltop Hosp	051514	02 Apr 12	325	690	02 Apr 13	16 Oct 12	3	3	690	0	0	0	0	DEFLHD
6	Otorhinolaryngologi	Hilltop Hosp	065688	20 Nov 12		335	23 Mar 14	14 Mar 14	4	3	458	123	0	2	1	ABCLHD
7	Otorhinolaryngologi	Hilltop Hosp	020310	26 Sep 12	0	334	24 Mar 14	14 Mar 14	3	3	513	179	0	1	1	
8	Otorhinolaryngologi	Hilltop Hosp	022468	28 Mar 13	0	330	28 Mar 14	21 Feb 14	3	3	330	0	0	0	0	ABCLHD
9	Otorhinolaryngologi	Hilltop Hosp	008422	23 Nov 12		328	30 Mar 14	14 Mar 14	4	3	455	127	0	0	0	DEFLHD
10	Otorhinolaryngologi	Hilltop Hosp	029252	02 Apr 13	0	325	02 Apr 14	21 Feb 14	3	3	325	0	0	0	0	ABCLHD
11	Otorhinolaryngologi	Hilltop Hosp	277731	18 Feb 13		323	04 Apr 14	17 Jan 14	4		368	45	0	1	1	ABCLHD
12	Otorhinolaryngologi	Hilltop Hosp	028531	22 Feb 13		321	06 Apr 14	24 Jan 14	4	3	364	43	0	1	1	ABCLHD
13	Otorhinolaryngologi	Hilltop Hosp	034016	12 Apr 13	0	315	12 Apr 14	21 Feb 14	3	3	315	0	0	0	0	ABCLHD
14	Otorhinolaryngologi	Hilltop Hosp	914438	12 Apr 13	0	315	12 Apr 14	21 Feb 14	3	3	315	0	0	0	0	DEFLHD
15	Otorhinolaryngologi	Hilltop Hosp	029414	16 Apr 13	0	311	16 Apr 14	04 Mar 14	3	3	311	0	0	0	0	ABCLHD
16	Otorhinolaryngologi	Hilltop Hosp	021849	16 Apr 13	0	311	16 Apr 14	26 Feb 14	3	3	311	0	0	0	0	
17	Otorhinolaryngologi	Hilltop Hosp	006118	19 Apr 13	0	308	19 Apr 14		3		308	0	0	0	0	ABCLHD
18	Otorhinolaryngologi	Hilltop Hosp	882572	02 Apr 13		307	20 Apr 14	14 Feb 14	4	3	325	18	0	1	1	ABCLHD
19	Otorhinolaryngologi	Hilltop Hosp	025723	22 Jan 13		306	21 Apr 14	21 Mar 14	4		395	89	0	2	2	ABCLHD
20	Otorhinolaryngologi	Hilltop Hosp	011047	22 Apr 13	0	305	22 Apr 14	21 Feb 14	3	3	305	0	0	0	0	ABCLHD
21	Otorhinolaryngologi	Hilltop Hosp	040152	22 Apr 13	0	305	22 Apr 14	12 Mar 14	3	3	305	0	0	0	0	DEFLHD
22	Otorhinolaryngologi	Hilltop Hosp	066351	22 Apr 13	0	305	22 Apr 14	12 Mar 14	3	2	305	0	0	0	0	ABCLHD
23	Otorhinolaryngologi	Hilltop Hosp	015688	07 Mar 13		305	22 Apr 14	24 Jan 14	4	3	351	46	0	1	1	ABCLHD
24	Otorhinolaryngologi	Hilltop Hosp	043914	24 Apr 13	0	303	24 Apr 14		3	3	303	0	0	0	0	DEFLHD
25	Otorhinolaryngologi	Hilltop Hosp	043702	24 Apr 13	0	303	24 Apr 14		3	3	303	0	0	0	0	

EDWARD – LHD/Facility Operational Reports

Step 5

Example of Business Decision Methodology enabling **dynamic investigation**



Select *an alternative* Business Decision Path *as required* and follow steps through the new Path

EDWARD – Statewide Reporting Framework

Estimated Elements for Build

- WL — Wait list
- ED — Emergency Department
- OT — Operating Theatre
- Suites/ Rooms
- Activity Summaries

INTEGRATED REPORTING

DELIVERY PLATFORM

KPI **SCORECARDS**
KPI information
KPI Summary Reports

KPI **DASHBOARDS**
Graphical information highlighting key information & **Activities Summaries (OT)**

OPERATIONAL **REPORTS**
Detail inc patient data

ORGANISATION PERSPECTIVE

State

LHD

Facility

/Down Organisation

anisation through differen

anagement to the front lin

EBI – Next Steps

EBI Program

1. Complete Build of Operating Theatre
2. Definition and build of validations for WL, ED and OT
3. Remediation of EDWARD Error Control Framework
4. Train EDWARD Co-Ordinators (Ad Hoc Access) before Go Live
5. Document requirements for Cerner PAS correction tool (WL, ED and OT) & modify tool, possibly extracts.
6. Data Quality EDWARD Lights On
    1. Effect critical CRs, and address known defects
    2. EBI System test of WL, ED and OT
    3. HSIPR Testing and Sign Off.
    4. UAT
        - LHD
7. Pilot
8. **Lights On** (WL, ED and Operating Theatre) Pilot LHD's first followed by all LHDs

NSW GOVERNMENT Health

EDWARD Lights On Data Quality Approach

EBI Program

1

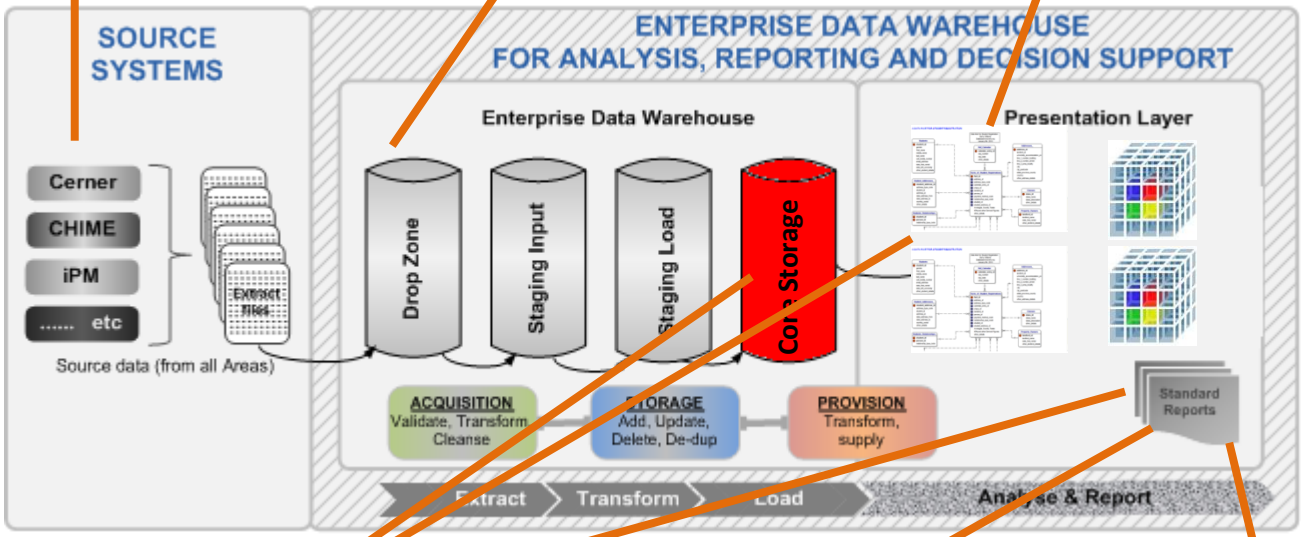
Data Integrity & Governance Team
Validate all LHD Source System Mappings with LHD's : HSIPR

2

Data Quality Team
Profile validations to determine frequency of errors and decision to build for WL and OT : HSIPR

3

Data Warehousing Team
Facilitate EDWARD Co-ordinators' access & self guided investigation of EDWARD: HSIPR & LHDs



4

EBI Team
Complete Unit and System Test : HSIPR

5

Performance Reporting Team
HSIPR Business Rules : HSIPR

6

LHD program Leads and Teams
User Acceptance Testing - Reports usability & Report data : LHDs

NSW GOVERNMENT Health

Contact details

EBI Program

Our contact details

If you would like further details you can go to our Intranet site or contact ***your LHD Contact (Program Implementation Lead)*** or ***program team members*** noted below.

LHD Contacts	Jeanne Mitchell	Hunter New England
	Natalie deWit	Illawarra Shoalhaven
	Trish Spillane	Northern New South Wales
	Dominic Dawson	South Eastern Sydney
	Graeme Loy	South Western Sydney

Program team members	**Program Director** **Robert Coppolino**	**0402 881 668** **8918 1601**	**Robert.coppolino@hss.health.nsw.gov.au**
	Solutions Architect James Prior	0448 789 939 8918 1606	james.prior@hss.health.nsw.gov.au
	Senior Business Analyst / Training Lead Jillian Ashby	0458 573 912	jillian.ashby@hss.health.nsw.gov.au
	Change Manager Kate Holz	0412 360 860 8918 1608	kate.holz@hss.health.nsw.gov.au

NSW GOVERNMENT Health