

# MAKING ICT, KNOWLEDGE AND INFORMATION WORK FOR BETTER HEALTHCARE

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Prof Ric Marshall OAM

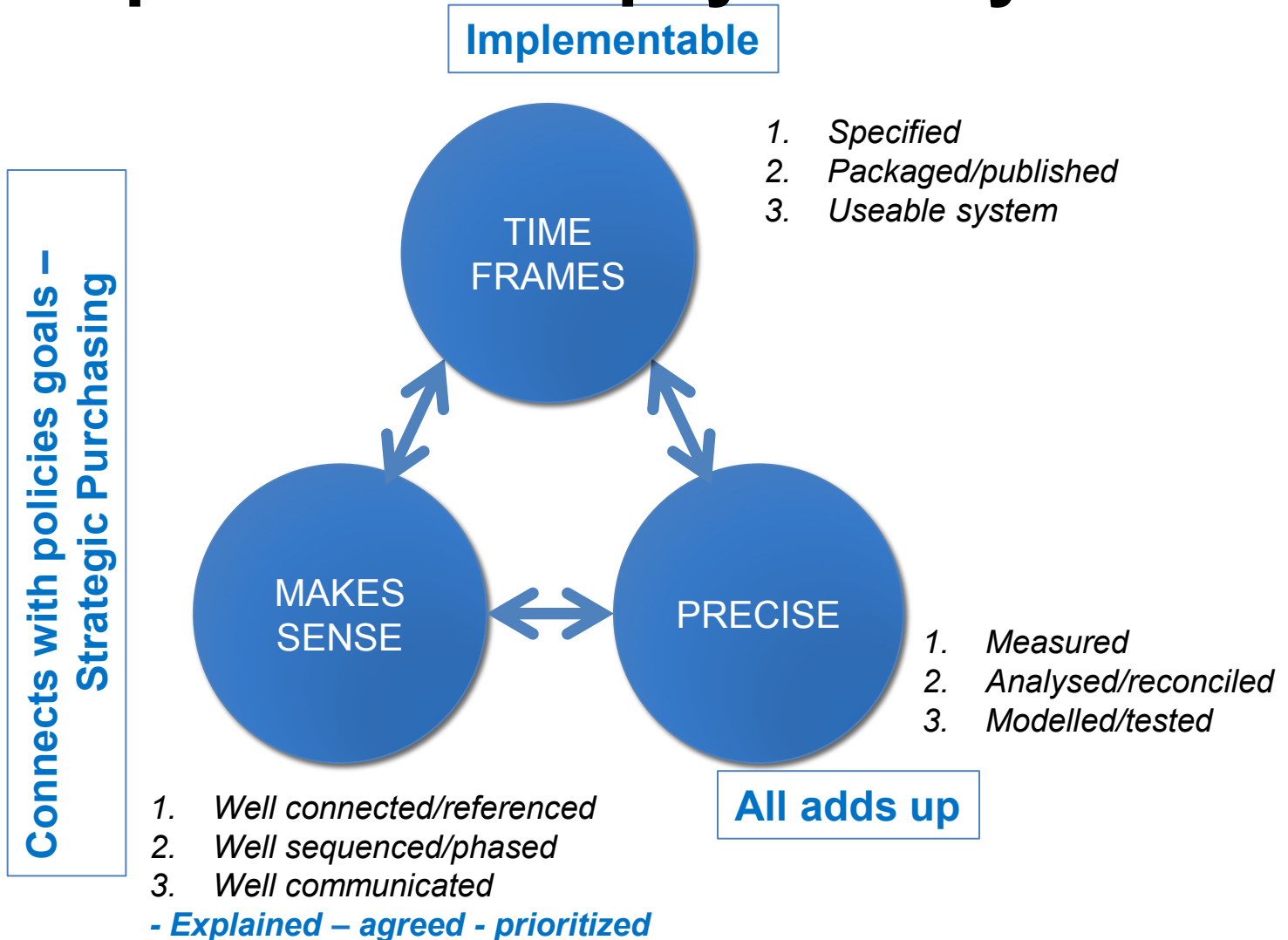
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# AGENDA – of PRESENTATIONS

## ICT in healthcare and DRG Implementation

1. WHY – ICT - DRG PRICING and improving healthcare
  - Making PERFORMANCE information work for better healthcare
2. WHERE – ICT - DRG IMPLEMENTATION IN PHILIPPINES
  - Scheduling the implementation phases – and achieving improvement
3. WHAT - DRG grouping and required information support
4. HOW - USING ICT - DRG DATA for performance
  - Asking the questions that stimulate improvement.

# The annual pricing and contracting cycle For a performance payment system



# The importance of COSTING INPUTS UTILISATION ANALYSIS

Tracking utilization to patients is actually more important than simply accurate cost weights for DRG pricing/purchasing.

# Benchmarking by item cost only ..FINANCIAL VIEW

Mean cost/case	Our hospital	Other hospitals
Nursing	750	550
Medical	500	420
Allied health	170	180
OR	420	340
Pathology	90	80
Imaging	65	50
Pharmacy	120	110
Consumables	75	90
Overhead	450	380
Other	200	200
<b>Total</b>	<b>\$2850</b>	<b>\$2400</b>

Don Hindle

...and cost/utilisation benchmarking..CLINICIAN VIEW

Elements of cPaths	Our hospital	Other hospitals
Admitted how long before procedure?	9 hours	6 hours
Post-op hours in CCU	6 hours	Nil
Review of discharge plan at admission?	No	Yes
Discharge OK delegated?	No	Yes

financial data and clinical pathways

From Don Hindle

# The incentives contracts

- A. ACTIVITY VOLUMES AND CASEMIX
  - Activity dimension 1. QUANTITY – or counts
  - Activity dimension 2. QUALITY OF CARE
  - Activity dimension 3. OUTCOMES
- B1. PRIORITISATION OF DEMAND
  - Need responsiveness and evidence of value
- B2. EQUITY AND ACCESS OF SERVICE PROVISION
- C. INTEGRITY OF MEASUREMENT AND EVALUATION
  - Data integrity – accuracy – relevance – usefulness – availability

# Making it work for better healthcare

## KEY QUESTION 1.

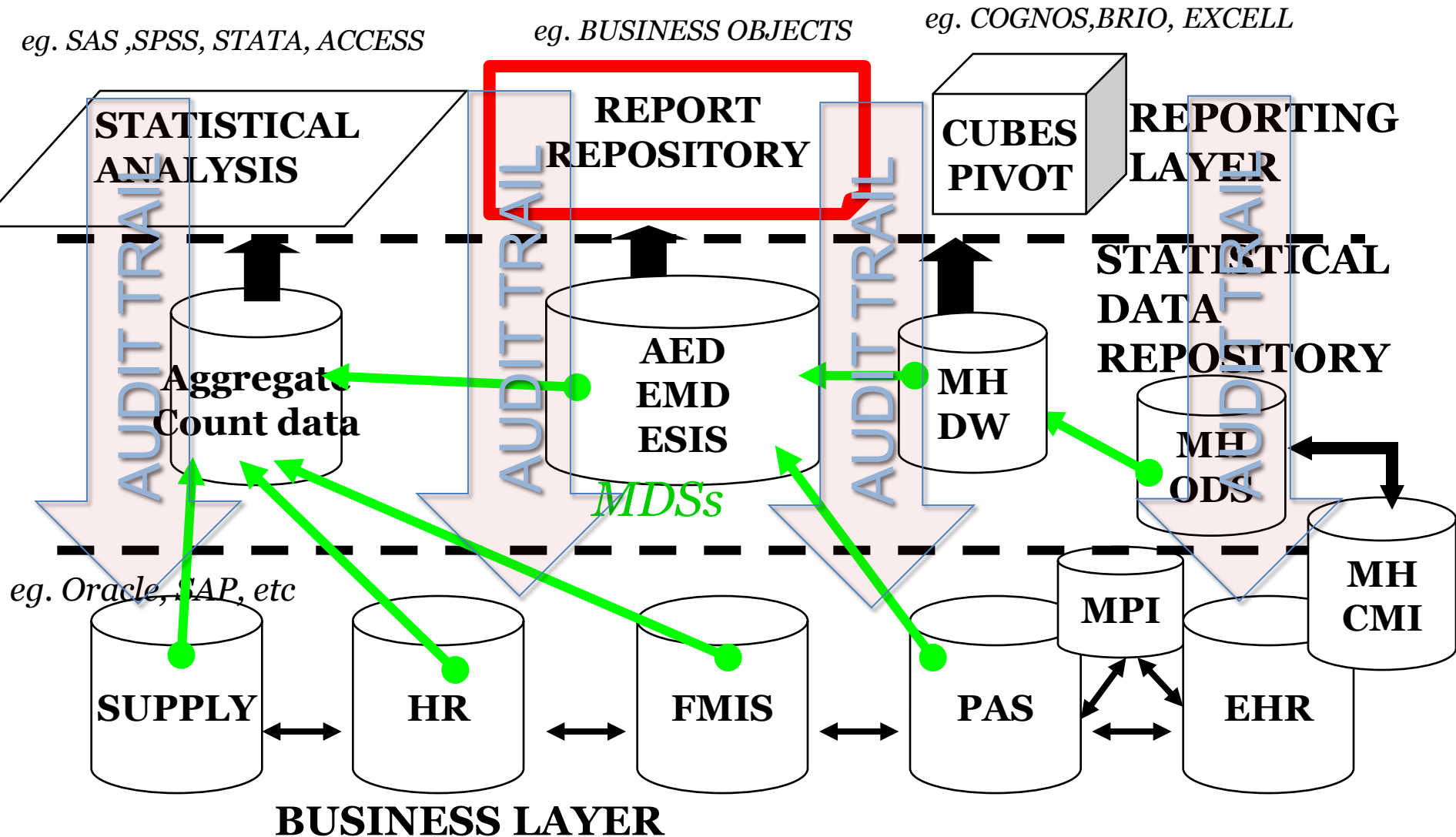
- How do we get the right data from activity and costing systems into regular clinical review and evaluation?



# TIMELY – ACCURATE – RELEVANT

- We need to be able to review whether changes to models of care are working
- We need to be able to review and adjust regularly – monthly – weekly
- We need to be able to check current activity against norms – agreed protocols - to guide decisions and choices

# EXAMPLE DATA FLOW SCHEMA & QA



# How much detail do we need?

- Why are the average costs or distributions higher / lower?
- What are we doing differently?
- Are our patient-type ratios different?
- Are we differentiating – tailoring the pathways to different patients – is our variability matching standard patterns

# Making it work for better healthcare

## KEY QUESTION 2.

- How do we better support clinicians to take the lead in performance improvement?

# Clinical process review

- Patient journey
- Clinical pathway
- Evidence based practice
- Variance analysis

# Making it work for better healthcare

## KEY QUESTION 3

- How can clinicians match best practice and properly accommodate natural patient variations?

# Definition of Clinical Pathways

- Systematically developed written statements that:
- Are evidence based
- Incorporate the views and experience of clinicians (medical, nursing, allied health) patients and managers
- Prospectively describe how care will provided and how effectiveness, quality and efficiency will be monitored and assessed.

# High volume case types – how many pathways?

Within a 600 -700 bed DGH in the NHS

- Emergency admissions account for 53% of all inpatient episodes and 83% of all bed days consumed within the Trusts
- 40 DRGs (of 603) account for 46% of emergency admissions and 42% emergency generated bed days
- 40 DRGs account for 60% of in patient elective episodes and 40% of elective bed-days, and
- 40 DRGs account for 84% of day elective episodes
- 10 DRGs account for 98% of all maternity and births admissions and 97% of maternity and birth bed days

From Pieter Degeling



## Year to Date February 2018– top 20 DRGs

A-DRG	Elective Inpatients	No of Adm	%	Cumm %
V60	Alcohol Intoxication and Withdrawal	158	5.24%	5.24%
F15	Interventional Coronary Procedures W/O AMI W Stent Implantation	115	3.81%	9.05%
G10	Hernia Procedures	113	3.74%	12.79%
F14	Vascular Procedures Except Major Reconstruction W/O CPB Pump	107	3.55%	16.34%
D11	Tonsillectomy and/or Adenoidectomy	105	3.48%	19.81%
L04	Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm	68	2.25%	22.07%
H08	Laparoscopic Cholecystectomy	60	1.99%	24.06%
O01	Caesarean Delivery	50	1.66%	25.71%
F06	Coronary Bypass W/O Invasive Cardiac Investigation	45	1.49%	27.20%
F08	Major Reconstructive Vascular Procedures W/O CPB Pump	44	1.46%	28.66%
E01	Major Chest Procedures	43	1.42%	30.09%
I03	Hip Replacement	43	1.42%	31.51%
I30	Hand Procedures	43	1.42%	32.94%
L07	Transurethral Procedures Except Prostatectomy	43	1.42%	34.36%
V61	Drug Intoxication and Withdrawal	42	1.39%	35.75%
F12	Implantation or Replacement of Pacemaker, Total System	42	1.39%	37.14%
G02	Major Small and Large Bowel Procedures	41	1.36%	38.50%
I04	Knee Replacement	39	1.29%	39.79%
B02	Cranial Procedures	38	1.26%	41.05%
E02	Other Respiratory System OR Procedures	36	1.19%	42.25%

## Year to Date February 2018

A-DRG	Day Cases	No of Adm	%	Cumm %
L61	Haemodialysis	14656	58.97%	58.97%
F74	Chest Pain	515	2.07%	61.04%
F42	Circulatory Disorders W/O AMI W Invasive Cardiac Investigative Procedures	448	1.80%	62.84%
G64	Inflammatory Bowel Disease	447	1.80%	64.64%
I66	Inflammatory Musculoskeletal Disorders	419	1.69%	66.32%
Z60	Rehabilitation	410	1.65%	67.97%
Q60	Reticuloendothelial and Immunity Disorders	408	1.64%	69.62%
Z64	Other Factors Influencing Health Status	336	1.35%	70.97%
I74	Injury to Forearm, Wrist, Hand or Foot	320	1.29%	72.26%
I30	Hand Procedures	307	1.24%	73.49%
X60	Injuries	232	0.93%	74.42%
G66	Abdominal Pain or Mesenteric Adenitis	218	0.88%	75.30%
O60	Vaginal Delivery	206	0.83%	76.13%
B68	Multiple Sclerosis and Cerebellar Ataxia	168	0.68%	76.81%
Q61	Red Blood Cell Disorders	156	0.63%	77.43%
G70	Other Digestive System Diagnoses	147	0.59%	78.02%
G67	Oesophagitis and Gastroenteritis	144	0.58%	78.60%
I75	Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle	139	0.56%	79.16%
B77	Headache	134	0.54%	79.70%
F76	Arrhythmia, Cardiac Arrest and Conduction Disorders	121	0.49%	80.19%

# Take home points

## The three reasons why we need to use ICT better

1. We want a fair and effective distribution of available resources according to policies such as equity, priority, eligibility, to pay for units of activity - or outputs - or outcomes.
  - A. *Be able to measure value for money at the unit of delivery level – **THEN** signal*
  - B. *Better understand the process - and incentivise efficiency and effectiveness*
  - C. *Enable funders - payers - and providers to be more accountable to their patients and funders, themselves and each other.*
2. Macroeconomic management of healthcare resources
  - A. *Overall system efficiency – agree **quantity** for the available budget – **THEN** signal*
  - B. *Performance at the system level – waiting lists – ALOS*
  - C. *Distribution of care – access (patients) – equity (patients and providers).*
3. Microeconomic management of healthcare resources
  - A. *Individual patient level experience – right care – right quality of care*
  - B. *Care protocols at the unit of care level – feedback on patterns – clinical discretion*
  - C. *The patients in the waiting room – how much value to add – when to take the next one – feedback on patterns*

# QUESTIONS

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