

# A Consultative Model of Care

improves HITH AMS & reduces Length of Stay

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# About APAC

- HITH service for Northern Sydney Local Health District (NSLHD)
  - Royal North Shore Hospital
  - 4x area metropolitan hospitals
  - >1600 beds
  - GP practices in NSLHD catchment

ACUTE POST ACUTE CARE

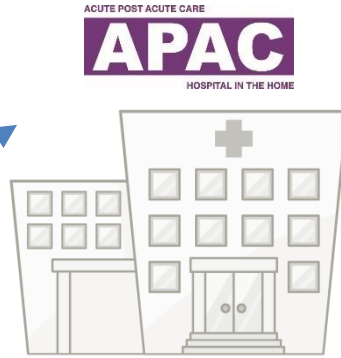
**APAC**

HOSPITAL IN THE HOME

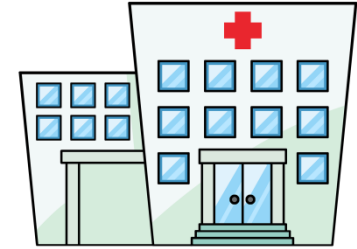


GP PRACTICES  
SPECIALIST ROOMS

NURSING HOMES



ACUTE HOSPITALS



- Nursing
- Pharmacists
- Physios
- Occupational Therapists
- Social Workers
- Community aides

**\* APAC patients require an Admitting medical officer \***

# APAC Medical Model

- Addition of 1.0 FTE Staff Specialist position to APAC service
  - Strengthen clinical governance
  - To provide in-house medical expertise



# Consultative Model of Care

- To optimise :
  - **quality & safety** of clinical care for APAC patients
  - **clinical handover**
  - **antimicrobial stewardship** in the APAC service
- Promote integrated health care
- Collaboration with ID Department
  - **after hours cover for HITH**
  - **initial focus on parenteral antimicrobial therapy (PAT) patients**



# Consultative Care Model: Clinical Governance structure

## 1. 3-Way Conversation (3WC) at Intake

- Health Contact Centre, APAC Medical Team

## 2. Daily paper round

- APAC registrar & on-call ID consultant

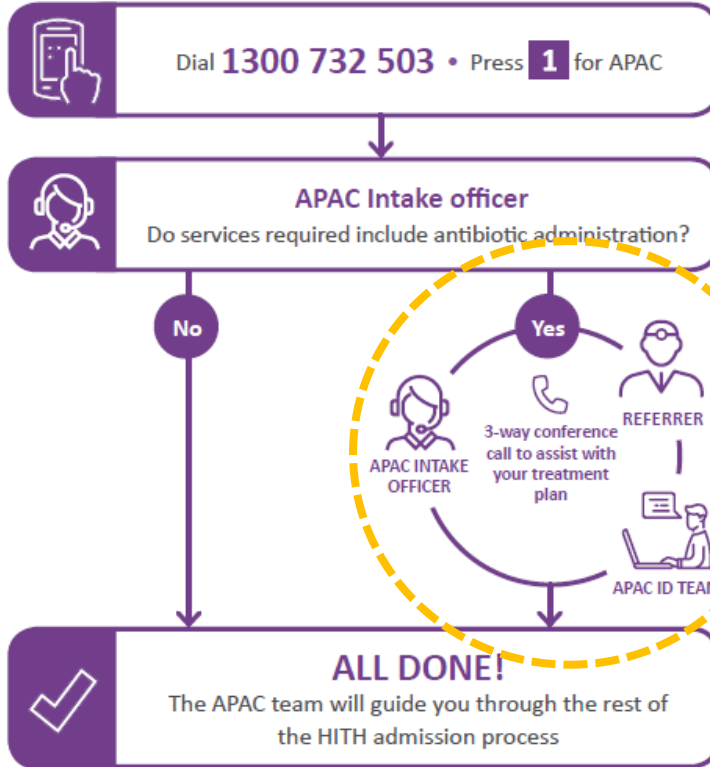
## 3. Weekly virtual ward round

- Multidisciplinary team meeting

## 4. Clinical Review Meeting

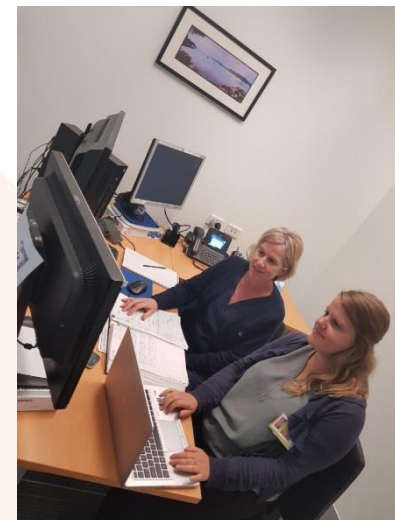
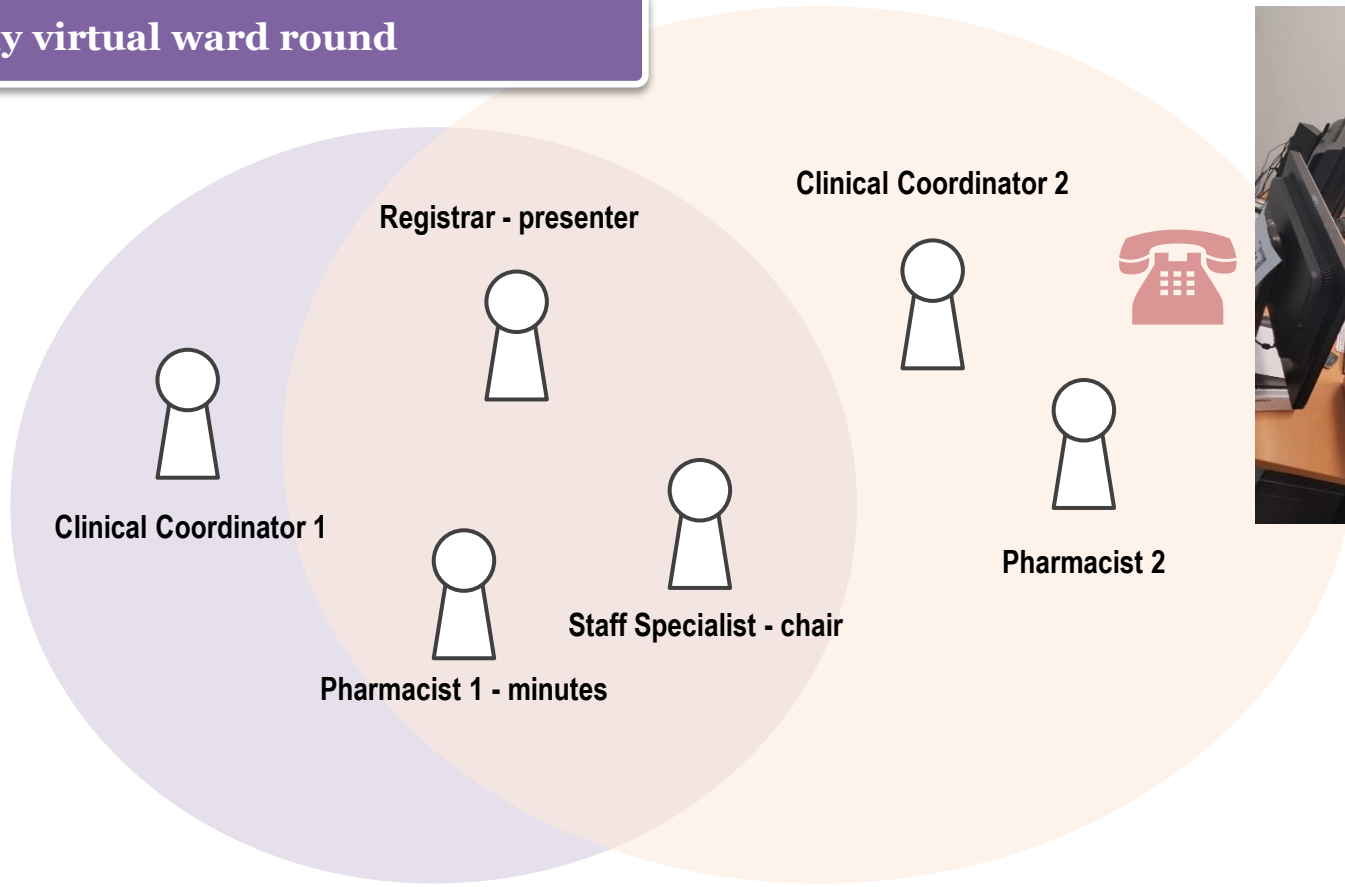
- Key incidents, quality review

## 1. 3-Way Conversation (3WC) at Intake



## 2. Daily paper round

### 3. Weekly virtual ward round



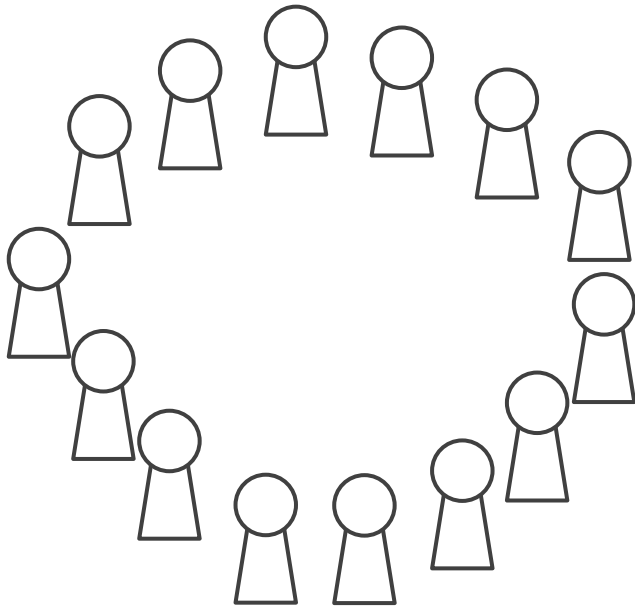


### 3. Weekly virtual ward round

- Discuss all patients on PAT (Parenteral antibiotic therapy)
- Review
  - treatment plan
  - clinical progress
  - routine pathology, TDM
  - microbiology
  - follow-up plans
- Identify patients requiring in-person ID review
- Discharge planning



## 4. Clinical Review Meeting



### Membership:

- APAC Staff Specialists x2
- APAC Manager
- APAC NUMs
- APAC Allied Health Manager
- APAC Clinical Nurse Consultant
- APAC Clinical Nurse Educators
- APAC Clinical Coordinator
- APAC GP Liaison
- APAC Pharmacist
- APAC Quality Manager
- PACH Quality Manager

### Purpose:

Internal multidisciplinary forum for morbidity & mortality analysis e.g. readmissions

Clinical governance & quality assurance

Meets monthly



# Evaluation Method

- Analysis of time period Feb 27 - Sept 10, 2017
  - 28 weeks post implementation of new APAC medical model
- Key aspects compared to corresponding time period in 2016
- HITH NAPS Audit Pilot May 2017



# Speciality Medical Input

- 84% of referral calls had 3WC at intake
- 100% active PAT patients discussed at weekly VR
  - Pending referrals also discussed (2-5/VR)
- APAC ID clinic:
  - 91 pts (14%) seen by registrar
  - 23 pts (4%) seen by consultant
  - 6 pts reviewed by both
- Additional **24%** required phone consultation with APAC medical team during HITH admission



# HITH AMS: patient redirection

- 117 patients redirected to non-HITH based tx during intake 3WC
- Top 3 diagnoses redirected:
  - Cellulitis: 49 (42%)
  - UTI: 16 (14%)
  - Community-acquired pneumoniae: 12 (10%)

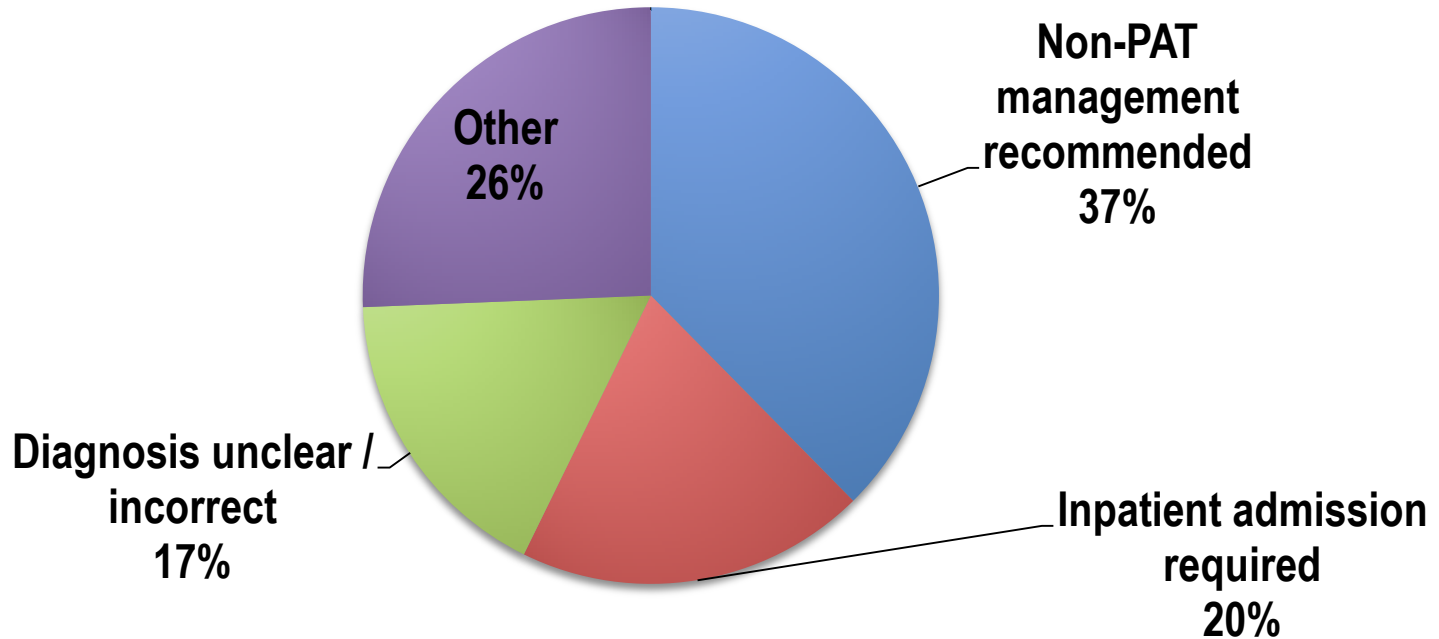


# Effect on HITH Admissions

Conditions	2015	2016	2017	Δ
Cellulitis	436	470	265	↓205 (44%)
UTI & Pyelonephritis	48	58	35	↓23 (40%)



# HITH AMS: redirection reasons



# HITH AMS: NAPS Audit Tool

Guideline Compliance		
	No. of abx prescriptions	% of total abx prescriptions
Directed therapy	81	42%
Compliant with TG	82	43%
Compliant with local guidelines	3	2%
Non-Compliant	15	8%
No Guidelines	4	2%
Not assessable	6	3%
<b>Total</b>	<b>191</b>	<b>100%</b>





# HITH AMS: NAPS Audit Tool

Appropriateness of antibiotic use		
	No. of abx prescriptions	% of total abx prescriptions
Optimal	156	82%
Adequate	17	9%
Sub-optimal	8	4%
Inadequate	3	2%
Not assessable	7	4%
<b>Total</b>	<b>191</b>	<b>100%</b>

75%

12%

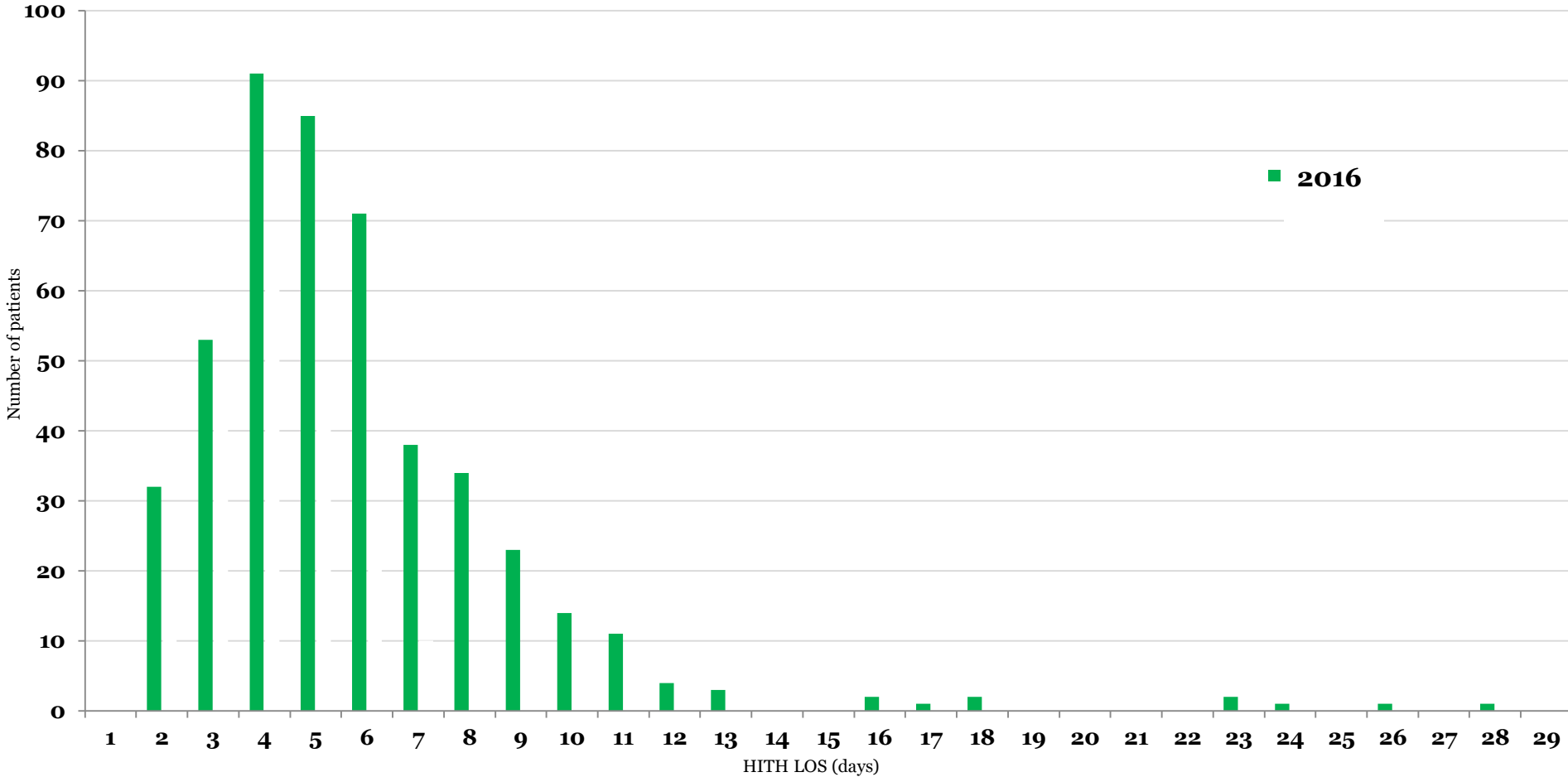
8.5%

Prescription Errors		
	No. of abx prescriptions	% of total abx prescriptions
Allergy Mismatch	1	1%
Micro Mismatch	1	1%
Incorrect Dose / Frequency	4	2%
Incorrect Duration	6	3%
Spectrum too broad	6	3%

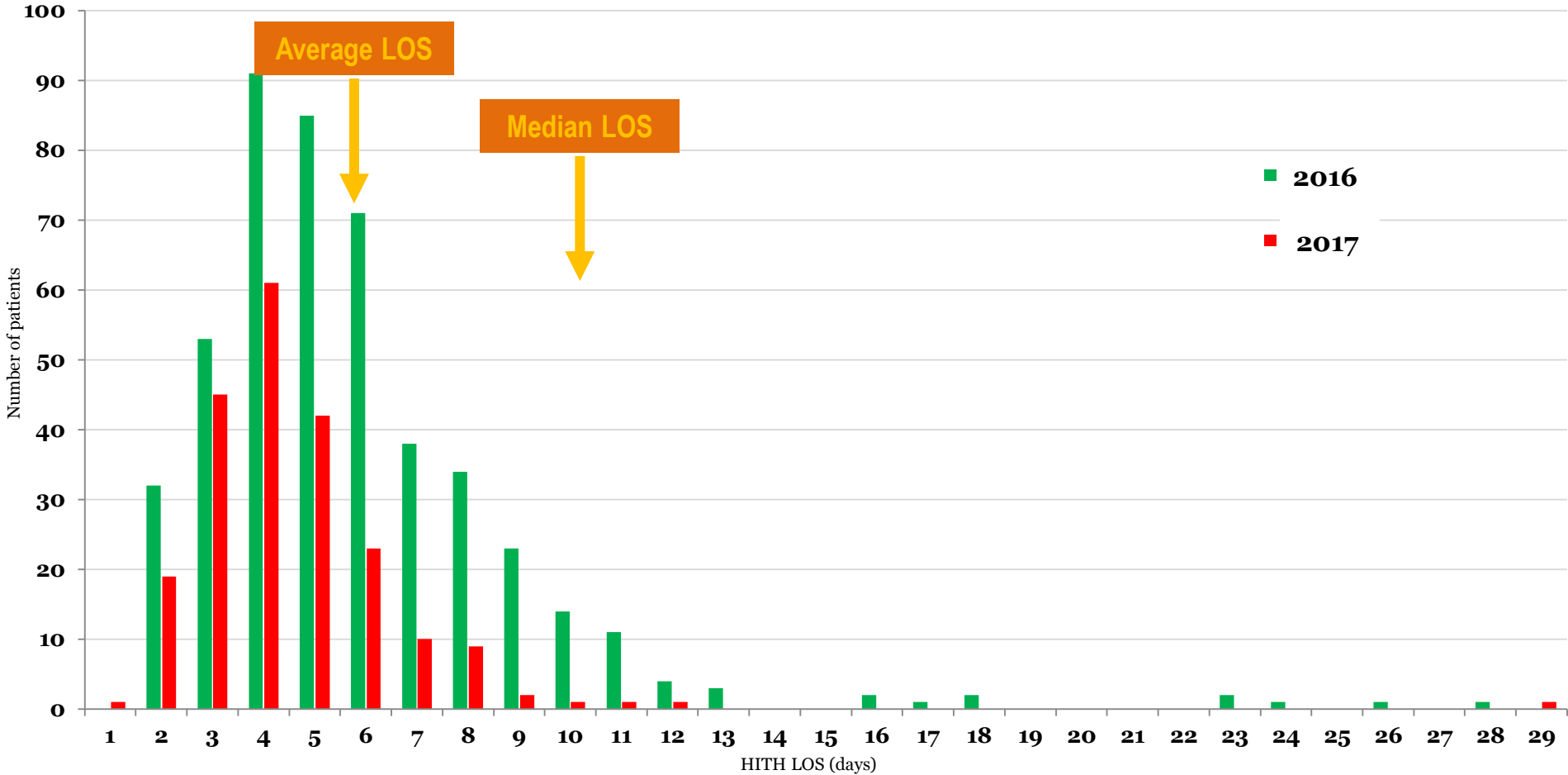
9%

8.5%

# Cellulitis: HITH Length of Stay

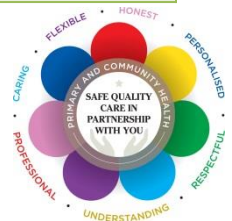


# Cellulitis: HITH Length of Stay



# Reduction in LOS for key DRGs

DRG	Length of Stay (days)					
	Average		Median		Mode	
Conditions	2016	2017	2016	2017	2016	2017
Cellulitis	5.8	4.6 (↓22%)	10.0	6.5 (↓35%)	4.0	4.0
Pyelonephritis	6.5	5.2 (↓21%)	6.5	5.0 (↓23%)	6.0	3.5
UTI	5.0	3.0 (↓40%)	5.0	3.5 (↓30%)	3.0	3.0



# Capacity Outcomes

Potential saved Bed Type 25 days during evaluation period:

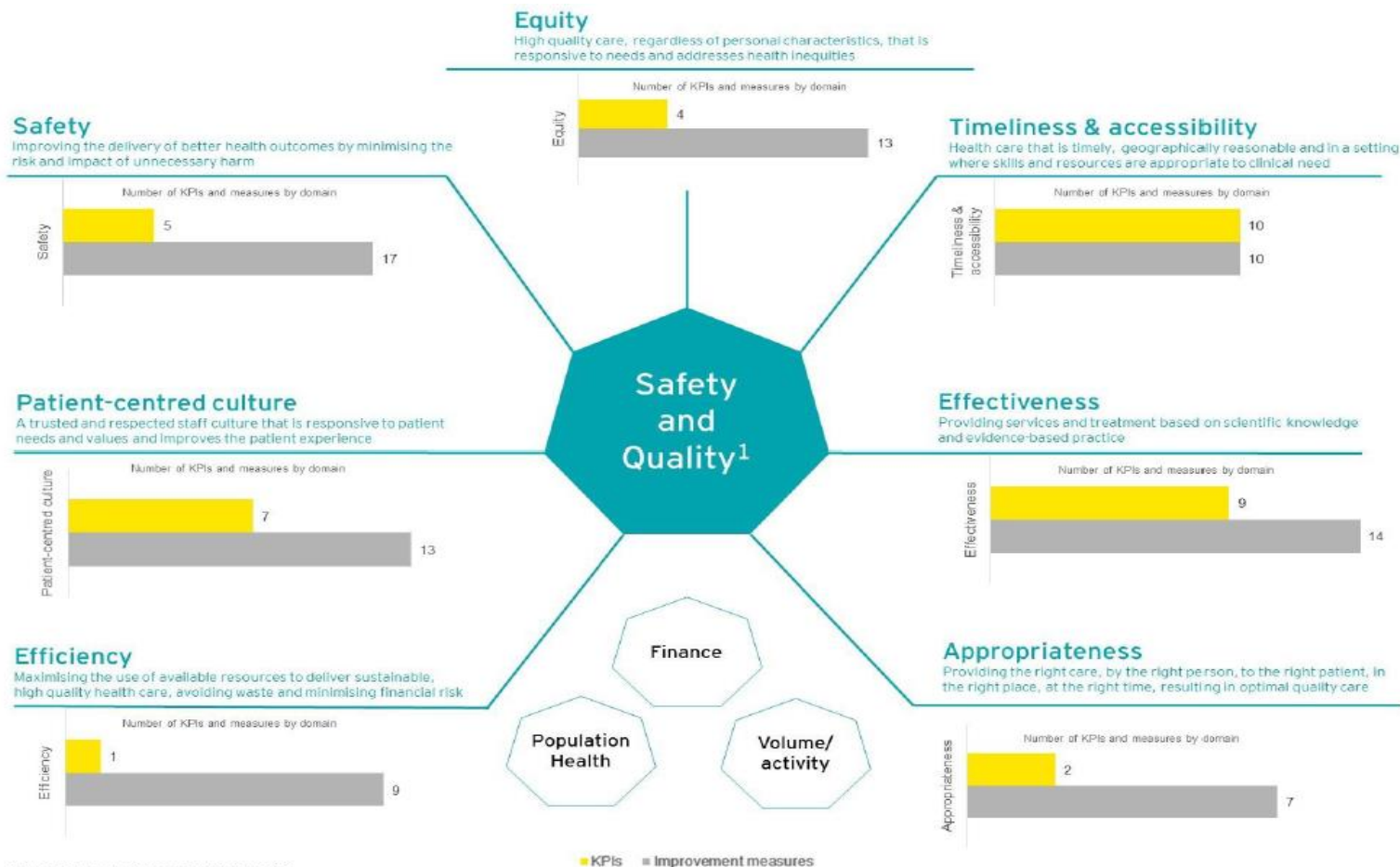
- from ↓LOS in 3 key conditions = 390 days
- from ↓admissions in 3 key conditions = 1304 days

**Annualised potential total saved Bed Type 25 days**

**= 1304 ÷ (28/52)**

**= 2422 days**





<sup>1</sup> Full definitions and references available on page 28

# Acknowledgements

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- NAPS Team

