

Project Title

Patient Experience In EMD

Project Lead and Members

Project leaders: Dr Nicole Cheung, Dr Lin Jingping, Dr Seo Woon Li

Project members: Wong Shuting, Rachel Lai, Adilah Saat, Kelvin Ng, Cathy Lee, Tan Li Xuan, Dr Brandon Koh, Shahidah Binte Sabtu Suzila Suradi

Organisation(s) Involved

National University Hospital

Healthcare Family Group Involved in this Project

Healthcare Administration, Nursing

Applicable Specialty or Discipline

Emergency Medicine, Healthcare Administrators, Patient Service Associate

Project Period

Start date: March 2023

Completed date: December 2023

Aims

To enhance patient experience in the Emergency Department (EMD) by reducing anxiety, improving communication, and providing non-clinical support.

Background

Due to long waiting and bed wait times, patients in the EMD often feel anxious and upset. The project aims to alleviate these discomforts through non-clinical care and improve patient experience scores.

Methods

Implemented a patient-centric webpage, added amenities (such as power banks and blankets), redesigned EMD wall murals for wayfinding, trained staff in communication, and prepared checklists for patients during wait times.

Results

The ePES score for patient experience improved to consistently above 85% from June 2023 onwards, and willingness to recommend scores stayed above 90% from August to December 2023. A reduction in negative feedback and an increase in compliments were also observed.

Lessons Learnt

Providing clear communication, accessible information, and a supportive environment are key to improving patient experience in emergency settings.

Conclusion

The project successfully enhanced patient experience in the EMD and demonstrated the importance of patient-centric approaches and communication in healthcare settings.

Project Category

Care & Process Redesign

Quality Improvements, Design Thinking, Value Based Care, Patient Satisfaction

Technology

Digitalisation, Systems/Platforms

Keywords

Emergency Medicine Department (EMD), Patient Experience, Non-Clinical Care ☒ Patient-Centric Webpage, Waiting Time Management, Visual Redesign, Wayfinding, ePES Score ☒ Service Improvement, Patient Satisfaction, Healthcare Innovation, Emergency Care, Digital Engagement, Healthcare Communication

Name and Email of Project Contact Person(s)

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Incredible Care QIX Award (Service Experience)

Project Title 19 : Patient Experience In EMD (SIP 6)

Department: EMD

Period: Mar 2023 – Dec 2023

Facilitators/Author: Jay Tan Wee Kiat

Sponsors (HODs): Adj A/Prof Peng Li Lee, Tan Si Ling, C Uma Chandran

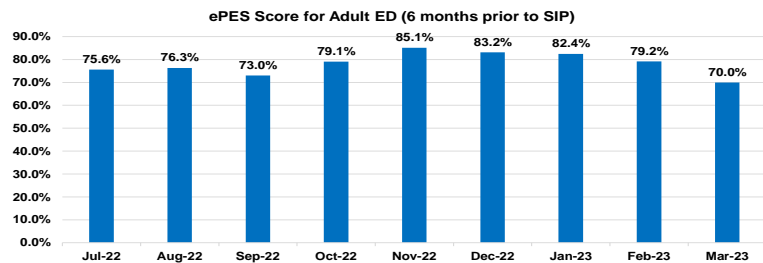
Team Leader/s: Dr Nicole Cheung, Dr Lin Jingping, Dr Seo Woon Li

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1. What was the situation?

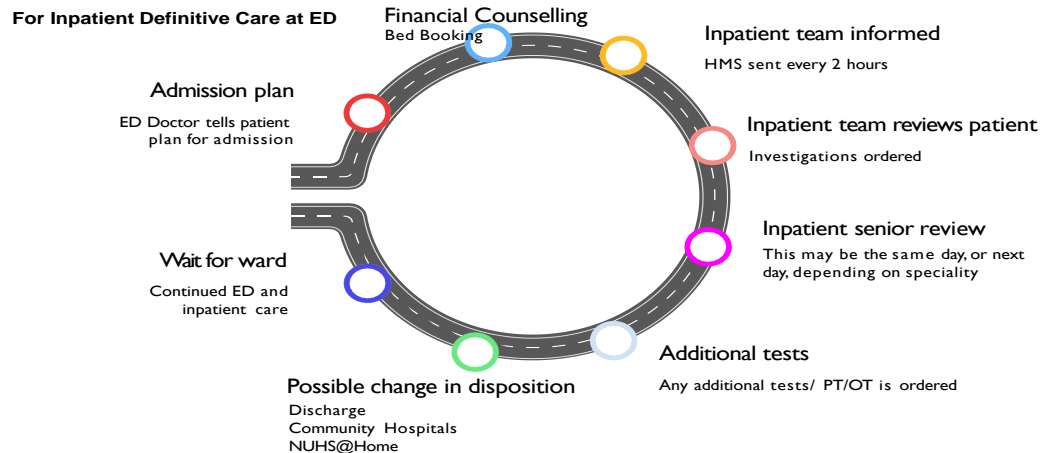
What were the service improvement issues, opportunities or challenges?

To create an improved **Patient experience** for both ambulant and non-ambulant patient in EMD.



Due to long waiting times & long bed wait times for patients in the EMD, Patients & NOK tend to feel anxious and upset. Therefore, there is a need to alleviate these discomfort through basic non-clinical care as well as early commencement of definitive care to create an **Improved Patient Experience**.

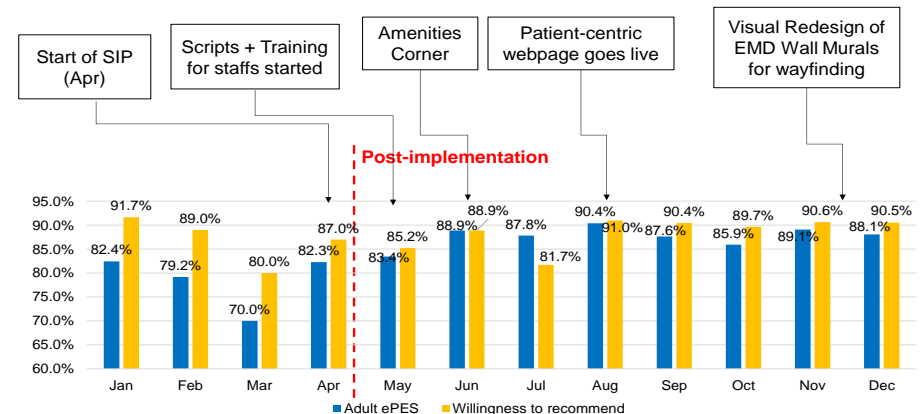
2. Service Transactions and Process Steps



3. New actions we have taken

SN	Description	Status	Date of Completion / Details
1	<p>Creation of Patient-centric Webpage To shorten the time taken for patients to get important information. There was previously no webpage related to this.</p>	Completed	<p>Webpage available on NUH webpage – Your Emergency / A&E Visit</p> <p>Visiting the A&E</p> <p>QR Code created to bring more publicity to the webpage</p>

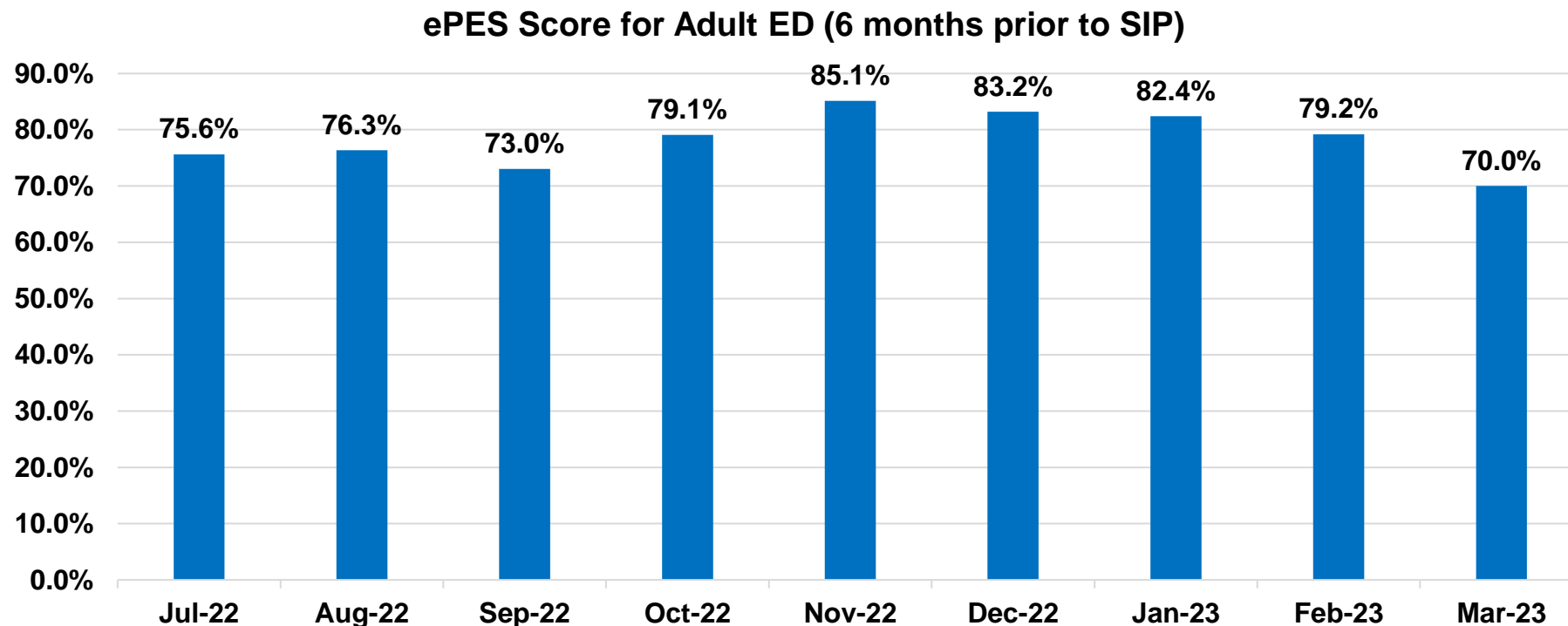
'Since implementation in April '23, ePES score has consistently improved and stayed above 85% from June onwards'
For willingness to recommend, the scores from Aug - Dec has consistently been above 90%



1. What was the situation?

What were the service improvement issues, opportunities or challenges?

To create an improved *Patient experience* for both ambulant and non-ambulant patient in EMD.



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Past Verbatim (Prior to project)



“The **waiting time** for the doctor inside the emergency ward could be shorter.

Very **cold** in the waiting area. I was **unsure where to go next** after seeing the nurse..



Too **gloomy decoration**. Very depressing to stay.

The **waiting times were so long**, and my phone ran out of battery.. would have been good if there was a **charging service** provided.



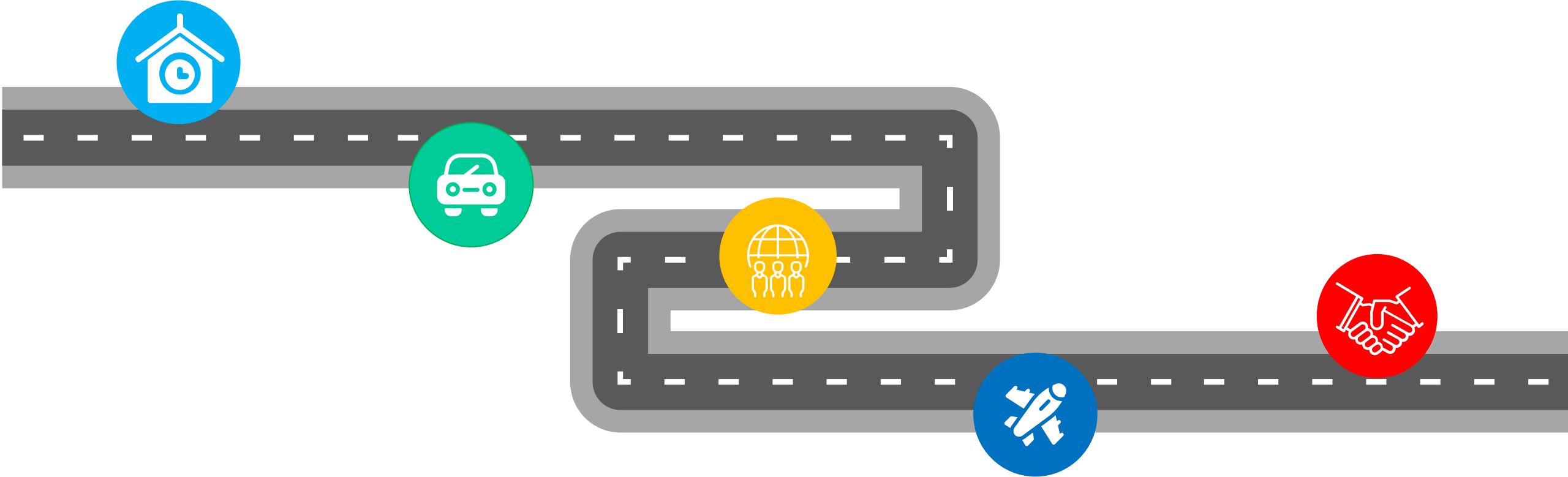
The **waiting time** to see a doctor and after seeing doctor, another round of **waiting** to get the MC and medication.

I have **difficulties getting to the Pharmacy**.. Why is the pharmacy no longer in the same location?



2. Service Transactions and Process Steps

Waiting in the Emergency Department



At Home

- Wait Time?
- What to Bring?

Screening / Registration

- Wait Time
- Long Queue
- No Seats

Triage

- Wait Time
- Cold & Hungry
- What's Next?

Consultation + NOK (Waiting)

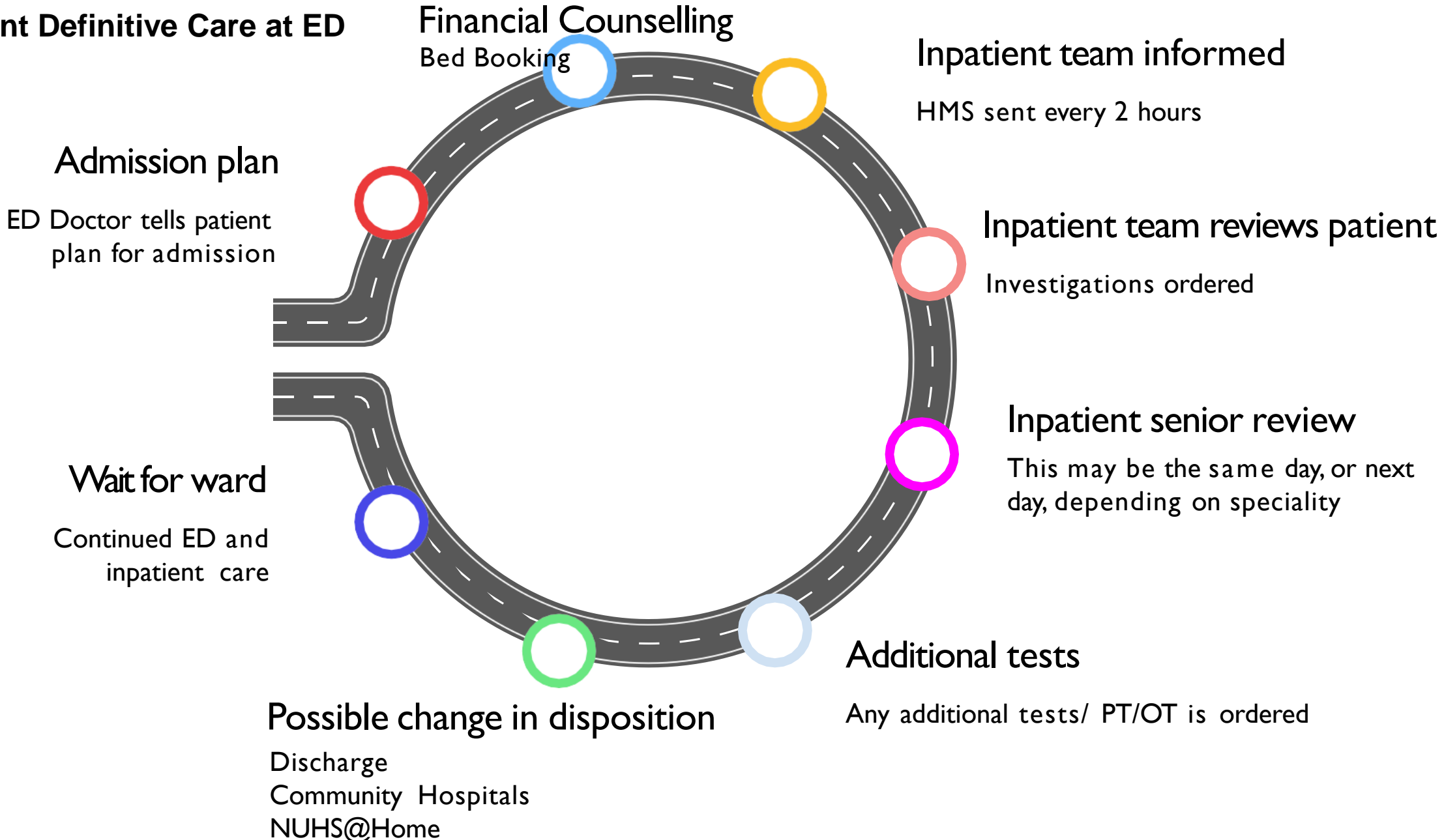
- Wait Time
- Is my condition urgent?

Subspecialty Referral / Pharmacy

- Wait Time
- What's next?

2. Service Transactions and Process Steps

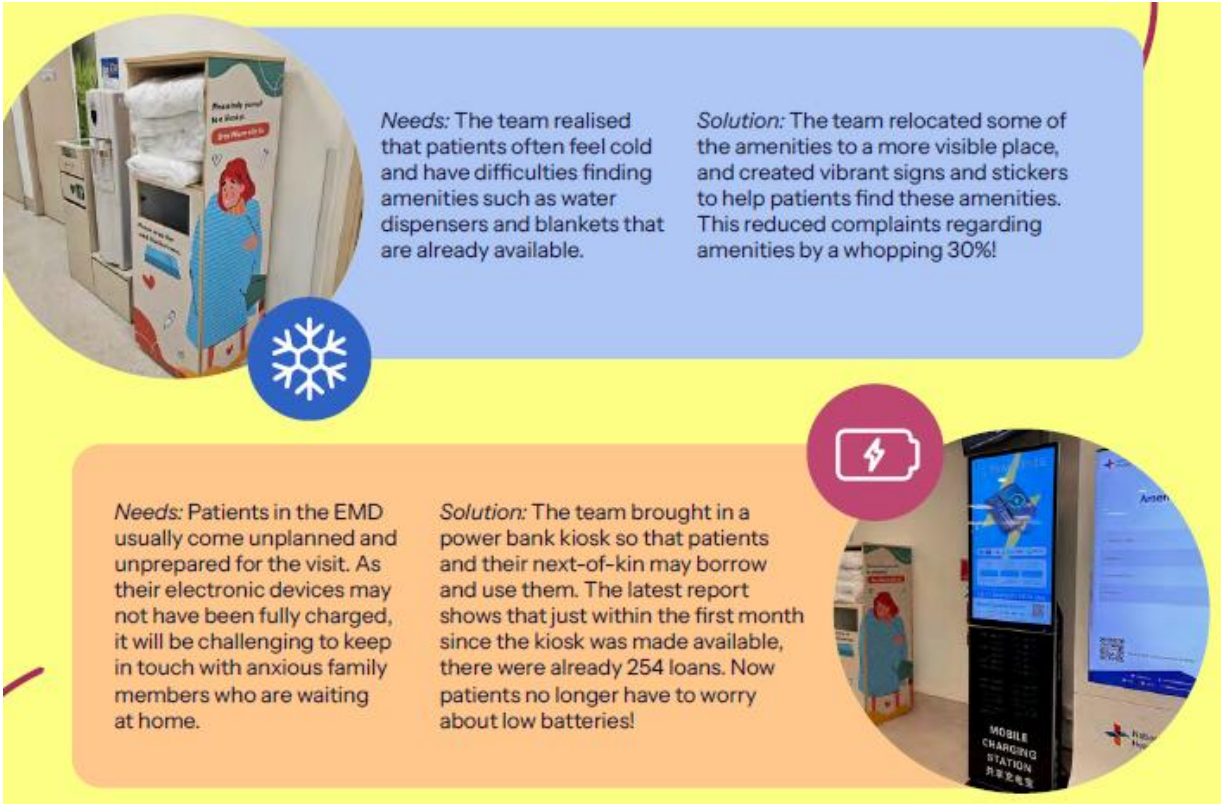
For Inpatient Definitive Care at ED



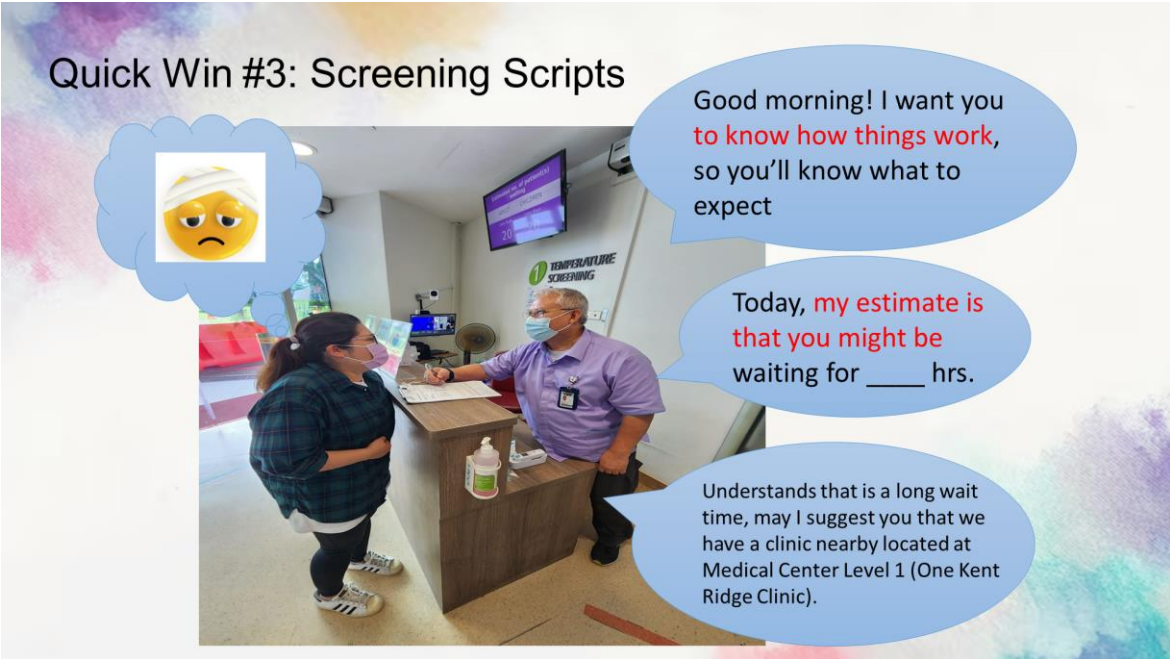
3. New actions we have taken

SN	Description	Status	Date of Completion / Details
1	<p>Creation of Patient-centric Webpage To shorten the time taken for patients to get important information. There was previously no webpage related to this.</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Find Specialties ▼</p> </div> <p>Visiting the Emergency Medicine Department</p> <p>In accordance with MOH guidelines, mask wearing is still required in all hospital settings to better protect both you and our staff from infectious diseases. Following the lowering of DORSCON status from Yellow to Green on 13 February 2023, most COVID-19 related tests and treatments are no longer covered by MOH and are chargeable as of 1 April 2023. For more information, please click here.</p> <p>Life-Threatening Conditions</p> <p>At the Emergency Medicine Department (EMD), priority will be given to patients with life-threatening conditions, such as persistent chest pain, or more serious and/or multiple injuries. For non-urgent conditions, please take note that waiting time can be at least 5 hours.</p> <p>Non-emergency Conditions and Symptoms</p> <div style="text-align: center;"> <p>NOT SURE WHEN TO VISIT THE EMERGENCY MEDICINE DEPARTMENT?</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 2px solid red; padding: 5px; width: 30%;"> <p style="text-align: center;">1</p> <p style="text-align: center; color: red;">PRIORITY</p> <p style="text-align: center;">EMERGENCY</p> <p style="font-size: small;">Life-threatening conditions that are attended to immediately</p> <p style="font-size: x-small;">SEVERE INJURIES SEVERE BLEEDING BREATHLESSNESS OR SEVERE CHEST PAIN ACUTE STROKE SYMPTOMS</p> <p style="text-align: center; color: red; font-size: x-small;">SEEN IMMEDIATELY</p> </div> <div style="border: 2px solid orange; padding: 5px; width: 30%;"> <p style="text-align: center;">2</p> <p style="text-align: center; color: red;">PRIORITY</p> <p style="text-align: center;">URGENCY</p> <p style="font-size: small;">Medical conditions which require early attention and assessment</p> <p style="font-size: x-small;">LIMB FRACTURES MILD CHEST PAIN OR BREATHLESSNESS HEAD INJURIES WITH BLEEDING FALLS WITH MULTIPLE INJURIES</p> <p style="text-align: center; color: red; font-size: x-small;">EARLY REVIEW</p> </div> <div style="border: 2px solid green; padding: 5px; width: 30%;"> <p style="text-align: center;">3</p> <p style="text-align: center; color: red;">PRIORITY</p> <p style="text-align: center;">NON-EMERGENCY</p> <p style="font-size: small;">Minor conditions which can be seen by a GP</p> <p style="font-size: x-small;">SPRAINS NOSEBLEEDS MINOR INJURIES FLU — MILD FEVER, COUGH, RUNNY NOSE MILD VOMITING, DIARRHOEA</p> <p style="text-align: center; color: red; font-size: x-small;">CONSIDER VISIT TO GP INSTEAD</p> </div> </div> </div>	Completed	<p>Webpage available on NUH webpage – Your Emergency / A&E Visit</p> <p style="text-align: center;">Visiting the A&E</p> <p>QR Code created to bring more publicity to the webpage</p>


3. New actions we have taken

SN	Description	Status	Date of Completion / Details
	<p>Amenities corner (Consolidation)</p> <ol style="list-style-type: none"> 1. Powerbank Kiosk 2. Additional Blanket Cabinet 3. Sticker Wrap 	Completed	
2	 <p>Needs: The team realised that patients often feel cold and have difficulties finding amenities such as water dispensers and blankets that are already available.</p> <p>Solution: The team relocated some of the amenities to a more visible place, and created vibrant signs and stickers to help patients find these amenities. This reduced complaints regarding amenities by a whopping 30%!</p> <p>Needs: Patients in the EMD usually come unplanned and unprepared for the visit. As their electronic devices may not have been fully charged, it will be challenging to keep in touch with anxious family members who are waiting at home.</p> <p>Solution: The team brought in a power bank kiosk so that patients and their next-of-kin may borrow and use them. The latest report shows that just within the first month since the kiosk was made available, there were already 254 loans. Now patients no longer have to worry about low batteries!</p>		<p>PowerBank Machine implemented in ED – 20 July 2023</p> <p>Blanket Cabinet & Sticker Wrap – June 2023</p> <p>Improved verbatims / feedback from patients - blankets / water</p>

3. New actions we have taken

SN	Description	Status	Date of Completion / Details
3	<p>Scripts for staff at screening, registration, triage and consultation wait areas</p> 	Completed	<p>All staff have been trained by Aug 23 to be more mindful of the language used when speaking to patients / NOK.</p>

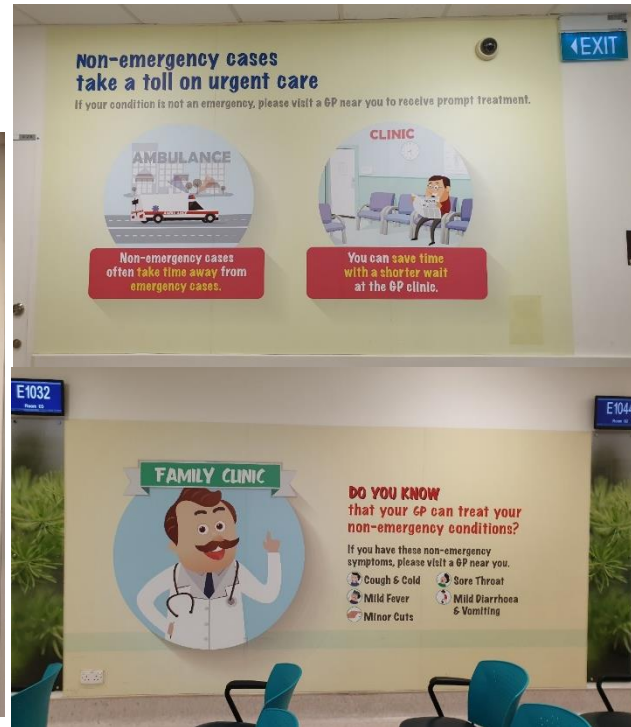
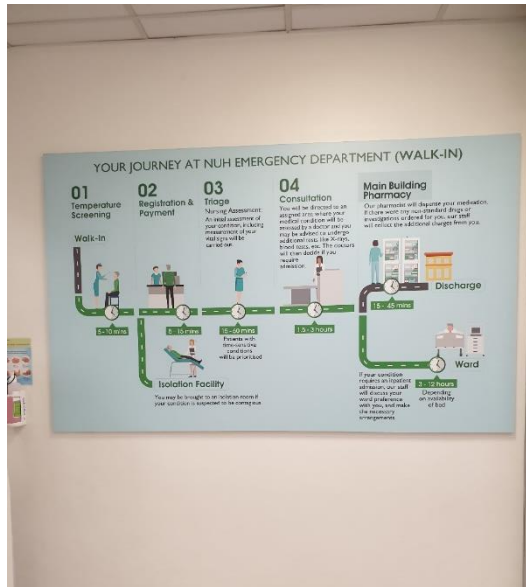
3. New actions we have taken

SN	Description	Status	Date of Completion / Details
4	<p>Question preparation checklist during waiting for consultation</p> 	Completed	<p>Completed</p> <p>Poster is on display in P3 Waiting Area</p> <p>Posters pending to be shared via on TV-on-wheels in P3 area.</p>

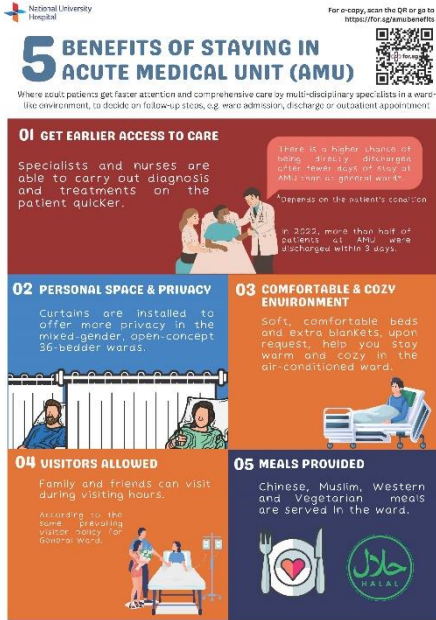
3. New actions we have taken

SN	Description	Status	Date of Completion / Details
5	<p>Visual Redesign of EMD Wall Murals for wayfinding</p> <p>Due to the layout of EMD, patients tend to get lost when looking for certain facilities such as the pharmacy, thus the wall murals have been redesigned to facilitate this as well as to reduce interruptions to nursing staff during triage</p>	Completed	<p>Wall Murals completed on 7th Dec 2023 Patient Survey completed 22th Dec 2023</p> <p style="text-align: center;">After</p>

Before



3. New actions we have taken

SN	Description	Status	Date of Completion / Details
6	Service Care Ambassador	Completed	Staffs are trained to provide non-medical care and updates to patient when needed.
7	<p style="text-align: center;">AMU Brochure</p> <p>The brochure was redesigned to allow patients to better understand AMU setting, to increase the uptake rate of AMU.</p>	Completed	<p>The brochures did provide better understanding to patients, but it did not improve the uptake rate of AMU as patients who declined AMU have several reasons such as Air-conditioned environment and the mixed gender setting which could not be changed.</p> 

3. New actions we have taken

SN	Description	Status	Date of Completion / Details
8	<p>Inpatient Gowns</p> <p>As the ED gown is designed for quick removal, the gown is built with a gap behind. Thus, for patients who require admission, they are given the inpatient gown once the order is given.</p>	Completed	<p><u>Feedback from a Patient</u></p> <p><i>“I appreciate the change as the ED gown made me feel vulnerable with the gap at the back.”</i></p>

Upon admission order



4. What outcomes and results have you achieved?

Recommended Measurements

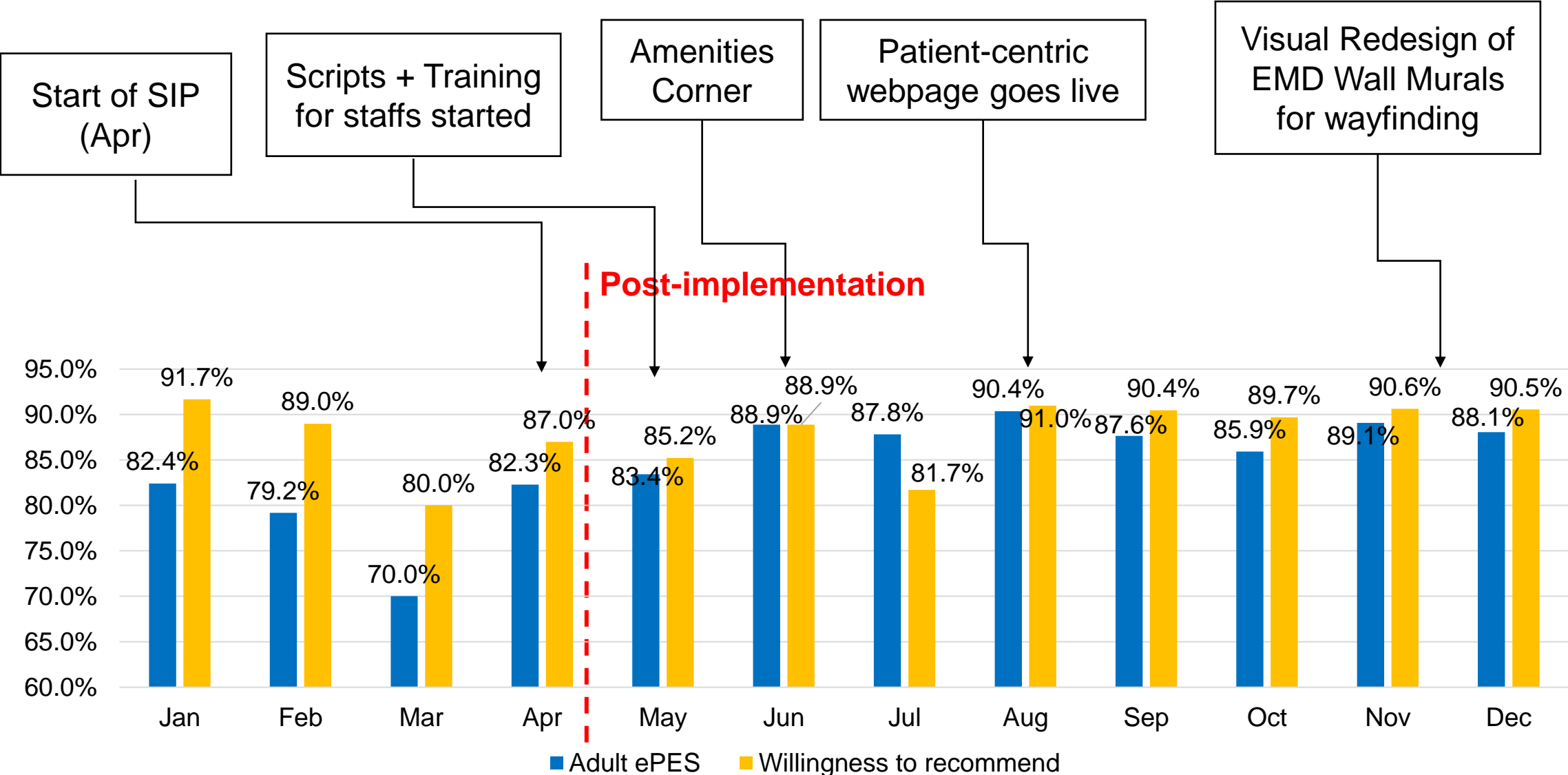
1. Service Improvement Survey (see Annex)
2. NUH EPES
3. Reduction in number of complaints
4. Increase in the number of compliments

Patient Survey regarding new webpage

- **The new webpage performs better in terms of speed and ease of finding information, and clarity of the information.**
- **Findings after redesign of webpage**
- It is faster to find information in the new webpage. 8 users were able to within 1 minute. Only 1 user can do so on the old webpage.
- The visual content within the page made it easier to spot the info needed without having to use the search bar feature that the users of old webpage resorted to.
- 70% of users were satisfied with the ease of finding information on the new webpage, more than 20% with the old webpage.
- 90% of users find the new webpage clear, compared to 30% with the old webpage.

‘Since implementation in April ‘23, ePES score has consistently improved and stayed above 85% from June onwards’

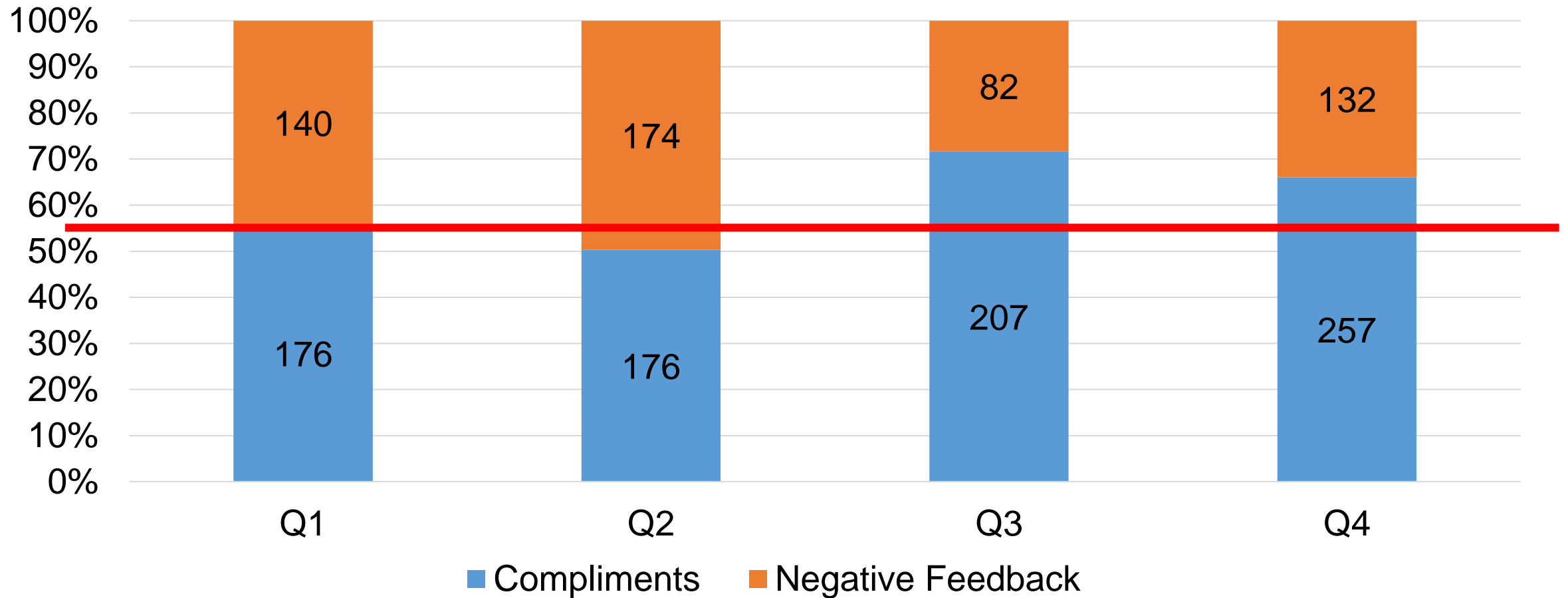
For willingness to recommend, the scores from Aug - Dec has consistently been above 90%



Ratio of compliments to negative feedback has increased in Q3 & Q4.

There was a COVID surge in Dec 23 leading to extended waiting time & bed wait time.

Compliments versus Negative Feedback



Negative Feedback for Wait Time, Communications, Service and Environment significantly decreased in Q3 & Q4.

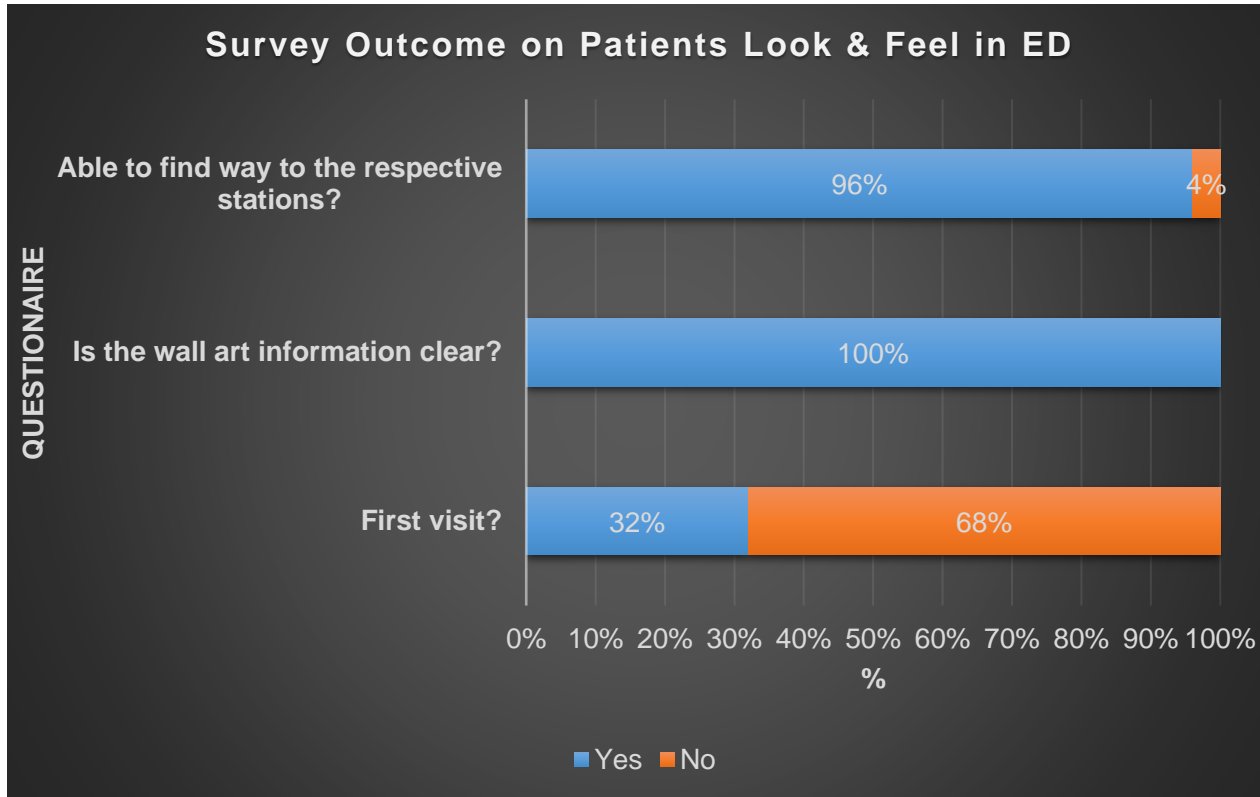
There was a COVID surge in Dec 23 leading to extended waiting time & bed wait time.

	Areas for Improvements (Adult ED)							
	Wait Time	Communication	Service	Environment	Manpower	Process	NIL	Compliments
Q1	75	33	12	12	4	27	83	263
Q2	47	31	52	18	10	16	27	176
Q3	34	12	11	7	1	17	68	207
Q4	53	14	29	8	2	26	68	257

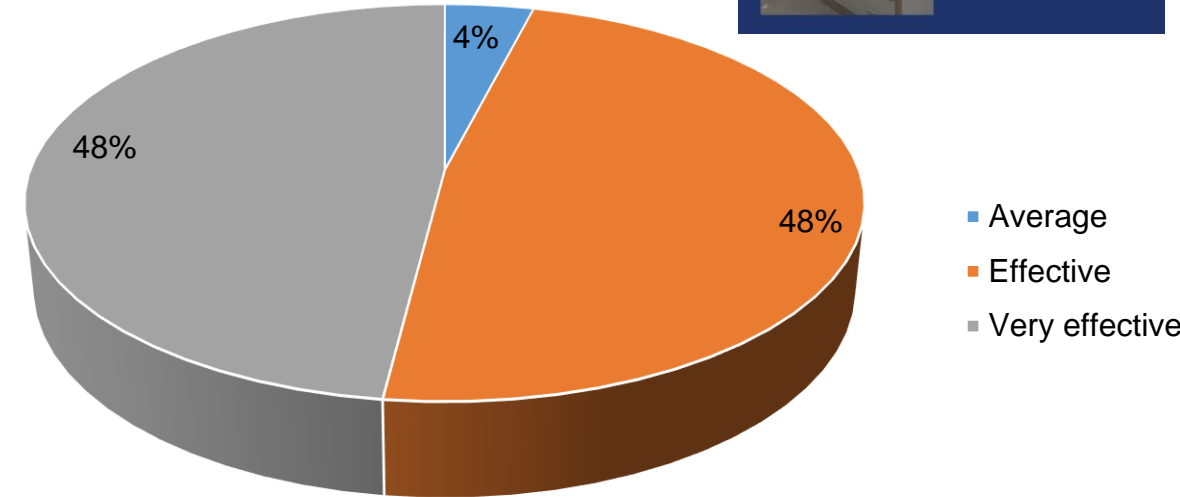
Significant reduction in the number of total negative feedback given in Q3 & Q4

	% Negative vs Total	Negative Feedback	Total Feedback
Q1	35.9%	140	389
Q2	46.2%	174	377
Q3	23.6%	82	346
Q4	28.8%	132	457

Survey on the Updated Wall Murals



Patient Satisfaction on Wall Murals



- A survey consisting of 25 patients / NOK was conducted randomly in ED.
- Out of 25 patients, 68% of them had been to ED before.
- 100% of them think that the wall art information is clear.
- 96% of patients can find their way to the respective areas using the new way-finders.

Overall, 96% of participants rated above **4 stars out of 5 stars** in term of effectiveness.

Annex. Service Improvement Survey

For a duplication of this form.sg, please write to us at QI@nuhs.edu.sg



Instructions

This survey is to find out the level of experience after the new service improvement idea / feature is implemented. At the same time, it can also be used to collect customers' perception if the new idea was not implemented.

- 1. Team to interview customers and fill in all qns
- 2. Minimum 30 respondents is required
- 3. Team may add more than 1 new idea / feature in the survey form

1. Date

2. Surveyor Name

3. Customer's Details
Name (How may I address you?)

4. Location of the Improvement
! Please fill in required field

5. Project Title
! Please fill in required field

6. Indicate the New Idea / Feature in brief (e.g. Provide blanket, Send SMS link, Play music,)

7. Post Satisfaction Level
If this idea/feature exists, how does it make you feel about the service experience?

5 - Wow! I am impressed! (Surprising)
4 - I am delighted (Desired)
3 - I expected this (Expected)
2 - I am neutral (Basic)
1 - I dislike it (Criminal)

! Team who scores higher achieves better outcome

! Verbatim which will help the team to either justify how successful they are or to help them refine their solutions

! Please fill in required field

8. Reasons
Please explain the reasons for your selection.

9. Pre Satisfaction Level
How was your service experience when this idea / feature was not in place?

5 - Wow! I am impressed! (Surprising)
4 - I am delighted (Desired)
3 - I expected this (Expected)
2 - I am neutral (Basic)
1 - I dislike it (Criminal)

! Score gap between qn 9 & 7 shows the significance in improvement

! Collect stories from your customers on how deprived they were without your new improvement

10. Reasons
Please explain the reasons for your selection.

Appendix

Show evidence and team effort to illustrate project implementation journey | Not more than 5 slides

Examples:

- Enhanced Standard Operating Procedure (SOP)
- Add Flowchart / Process chart
- Pictures (implemented changes)
- etc