



AI & THE PATIENT EXPERIENCE

energesse



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OUTLINE

- 1 The AI Dilemma**
- 2 Patient experience in healthcare**
- 3 PX improvement technologies**
- 4 AI in Australian Use Cases**
- 5 Future AI solution – PXme**
- 6 Trial opportunity**

Leading Specialists In Patient Experience



Western Sydney
LHD

South West
Sydney LHD



GUHealth

CSIRO Health
& Biosecurity



HCA
Healthcare Australia

phn
EASTERN MELBOURNE
An Australian Government Initiative



Australian
Academy of Health and
Medical Sciences

Apple Consultants
Network



Genea
WORLD LEADING FERTILITY

wavelength
INTERNATIONAL

Bupa

Energesse Experience

70

**Health & Care
Organisations**

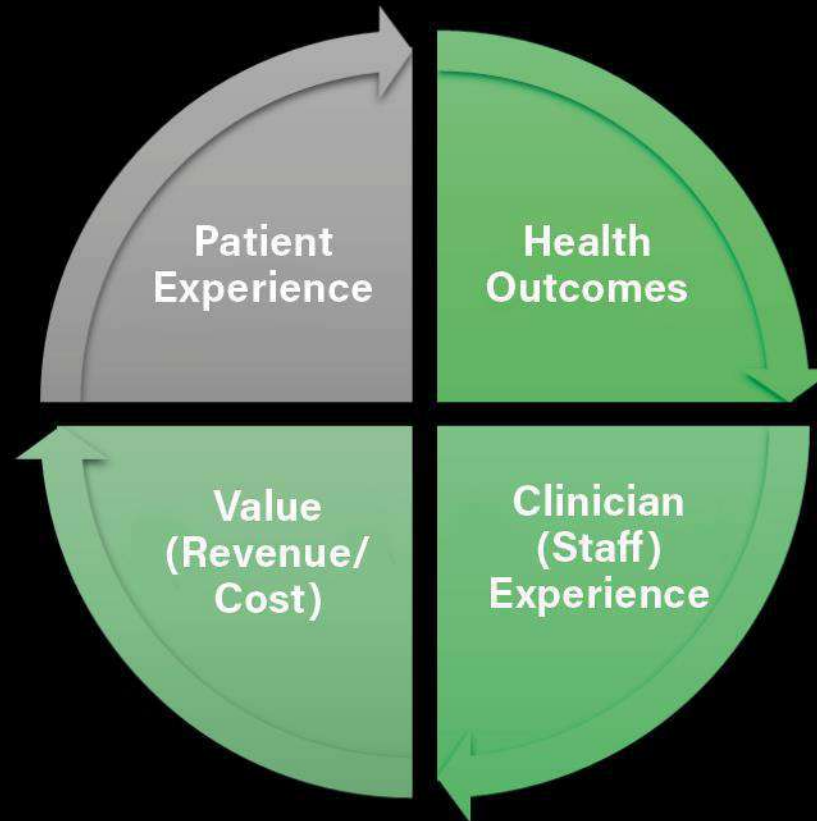
5

Countries

6

**Million Lives
Impacted**

Healthcare Quadruple Aims



1. Don Berwick et al Health Affairs 2008 Triple Aim, Insitute of Healthcare Improvement 2. Bodenheimer et al Annals of Family Medicine 2014



What shapes PX?

The sum of all interactions = Human + Environment + Technology experiences



JACK MA VS ELON MUSK

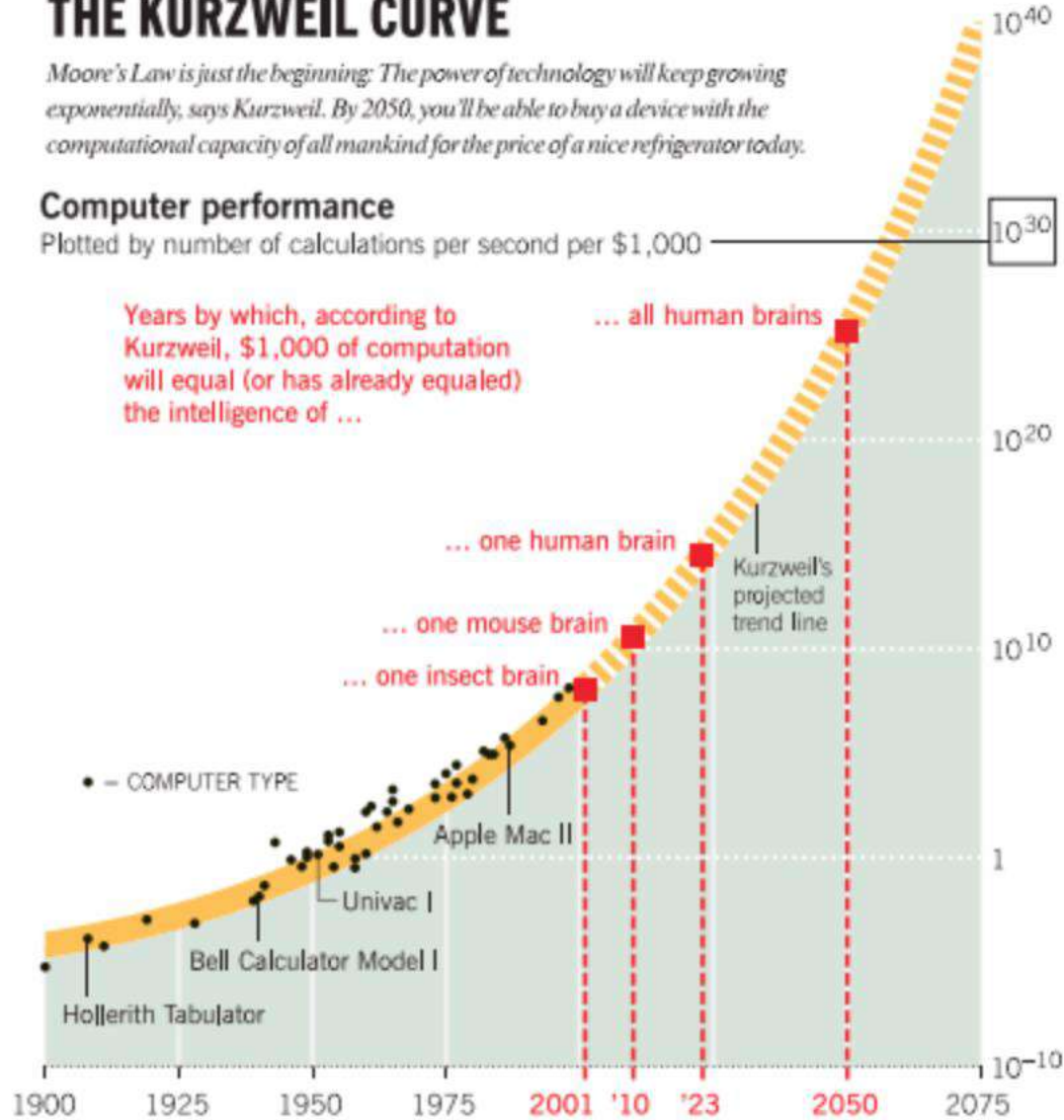
THE KURZWEIL CURVE

Moore's Law is just the beginning: The power of technology will keep growing exponentially, says Kurzweil. By 2050, you'll be able to buy a device with the computational capacity of all mankind for the price of a nice refrigerator today.

Computer performance

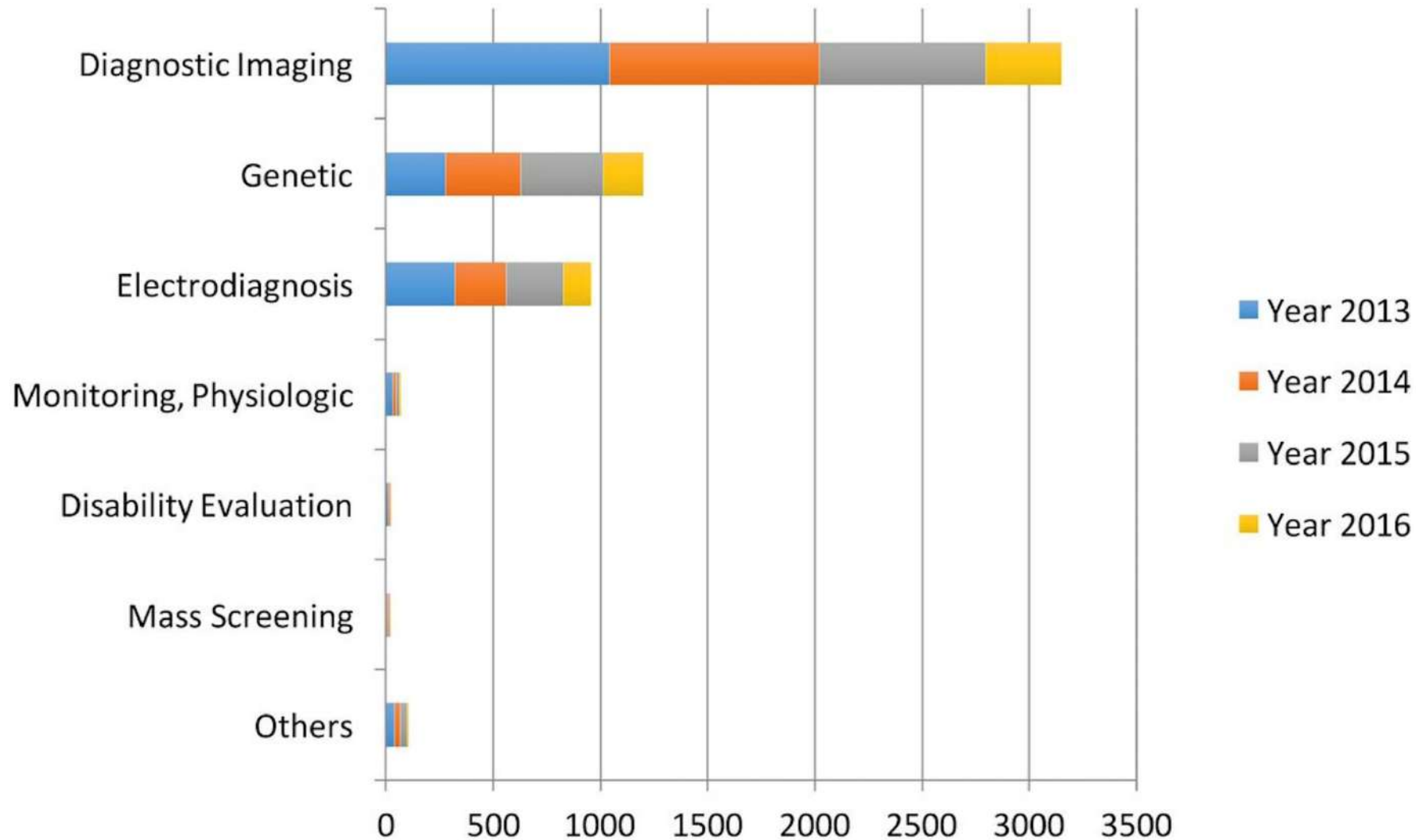
Plotted by number of calculations per second per \$1,000

Years by which, according to Kurzweil, \$1,000 of computation will equal (or has already equaled) the intelligence of ...



SOURCE: DATA FROM RAY KURZWEIL

AI UTILISATION IN HEALTHCARE





THE PATIENT'S CHALLENGES

THE PATIENT'S CHALLENGES



WHAT DO HEALTH EXPERIENCES DO CONSUMERS WANT?

Empathize with *me*.



Meet *me* where I
am.



Nurture *me*.



Make it easy for *me*.



AI COMPANIONS



Nearly Half Of Us Can Imagine Falling In Love With Siri


Forty per cent of people say they can imagine going head over heels for their virtual assistant


WIRED Technology | Science | Culture | Video | Reviews | Magazine

Falling in love with AI virtual assistants: a creepy love affair nearer than you think

—

🐦 📺 ✉️

 By LIAT CLARK
Monday 9 December 2013

 Her - Official Trailer 2 [HD]

INFO VINCLU

Mashable



Energesse expands patient experience program following positive feedback

Written by Kate McDonald on 22 March 2018.



Sydney-headquartered patient experience and analytics firm Energesse is rolling out its MES Experience real-time patient feedback program to hospitals in the South Western Sydney Local Health District following positive results from its first implementation at Western Sydney LHD.

Patient experience platforms are increasingly being used worldwide to provide real-time data to frontline staff and healthcare managers. Energesse has

[customised \(https://www.pulseitmagazine.com.au/news/australian-ehealth/2974-real-time-feedback-](https://www.pulseitmagazine.com.au/news/australian-ehealth/2974-real-time-feedback-)

Science Of Patient Experience Improvement



Experience: Capture, Measure & Understand Experience

Emotions: Analyse human factors, stories & expectations

Engagement: Engage front-line, leadership & governance

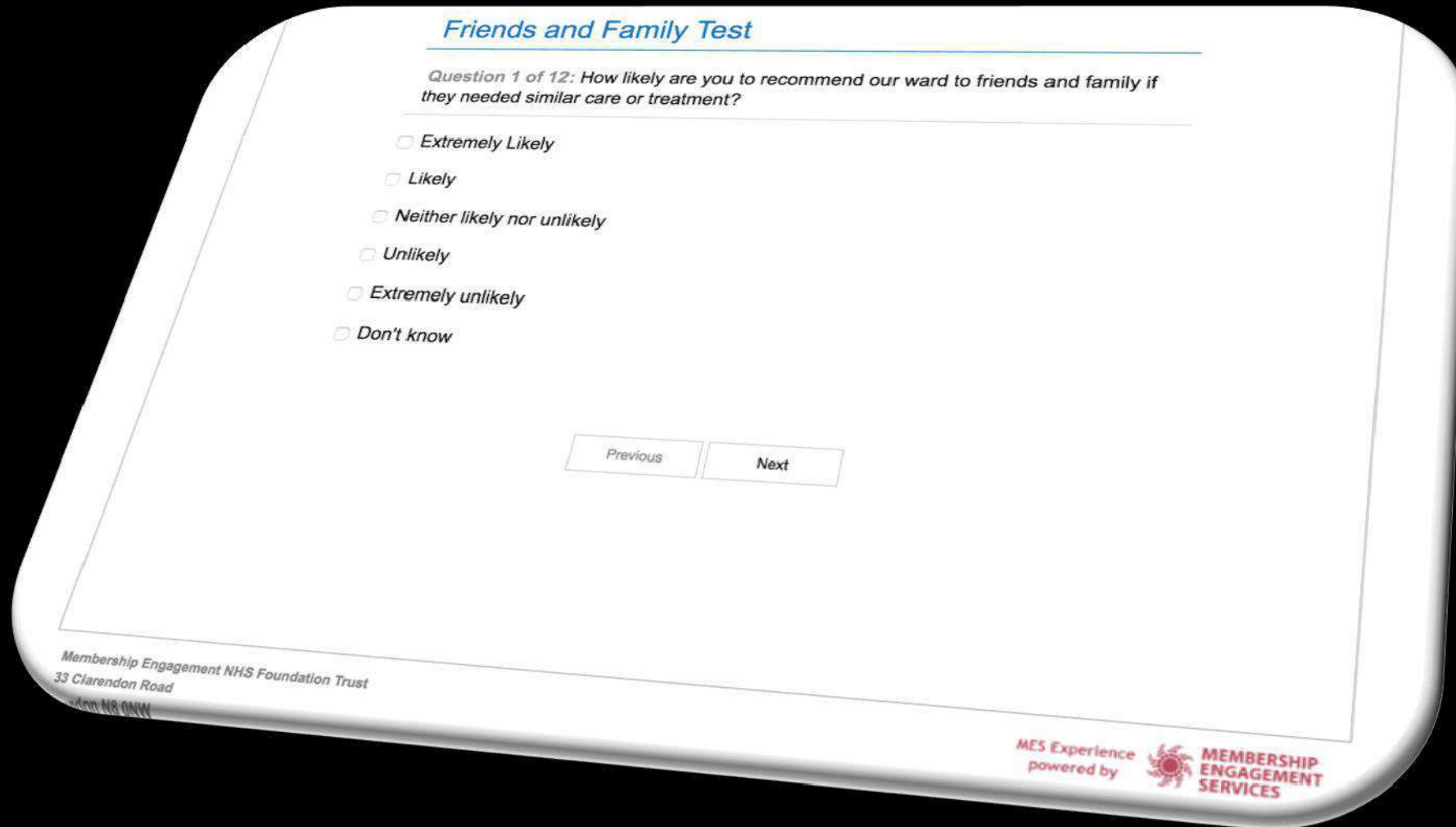
Execution: Strategy and Solution Implementation - service recovery, quality improvements and policies

Excellence: Accountability & Key Performance Indicators

Evolution: Scale Maturity, Capability & Sustainability



AI & Structured Datasets – Quantitative Patient Surveys



AI & Unstructured Datasets – Qualitative Patient Comments

Friends and Family Test

Question 2 of 12: Please can you tell us the main reason for the answer that you have given to Question 1.

Please tick this box if you do not wish your comment to be made public.

*"Nurse Sarah was pleasant but the doctor was very rushed and I did not understand his advice.
The exit door slams all night, I haven't been able to sleep for 5 days since my operation".*

Maximum of 500 Characters

Previous

Next

Omni-Channel Approach



Online



Text Message
(SMS)



Kiosk and Tablet



QR Code & NFC Chips



Email



Postcards and Drop-boxes

Frustration & Anger

Delight & Excitement

Detractors

Promoters

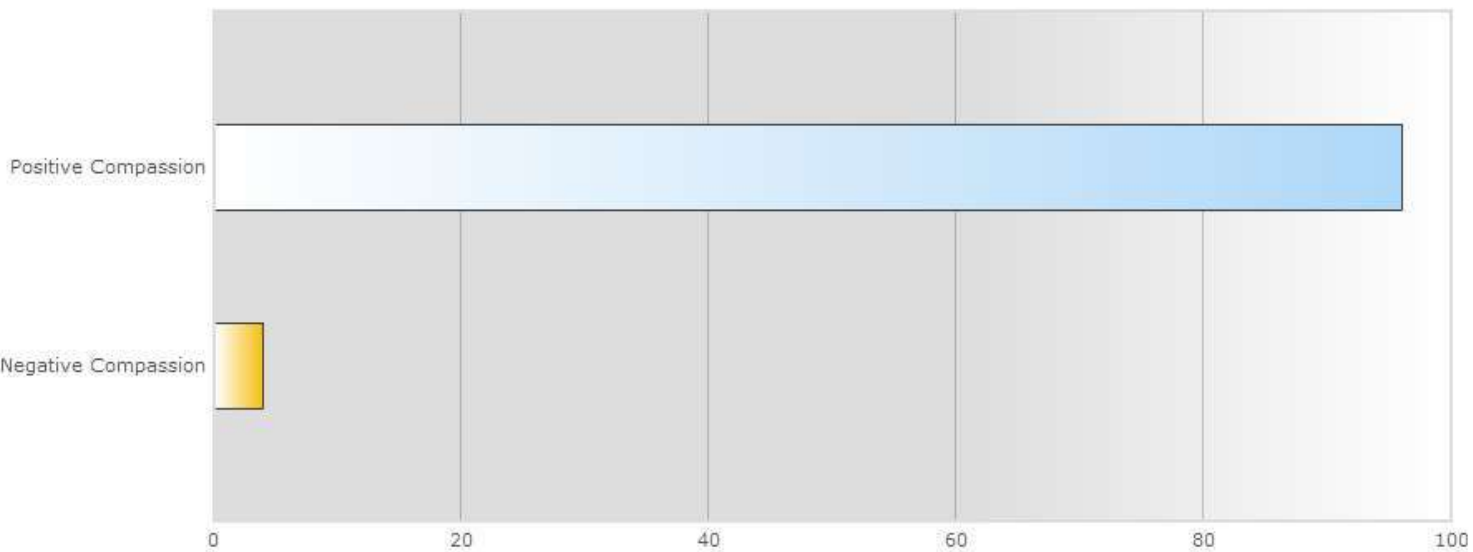


Detractors

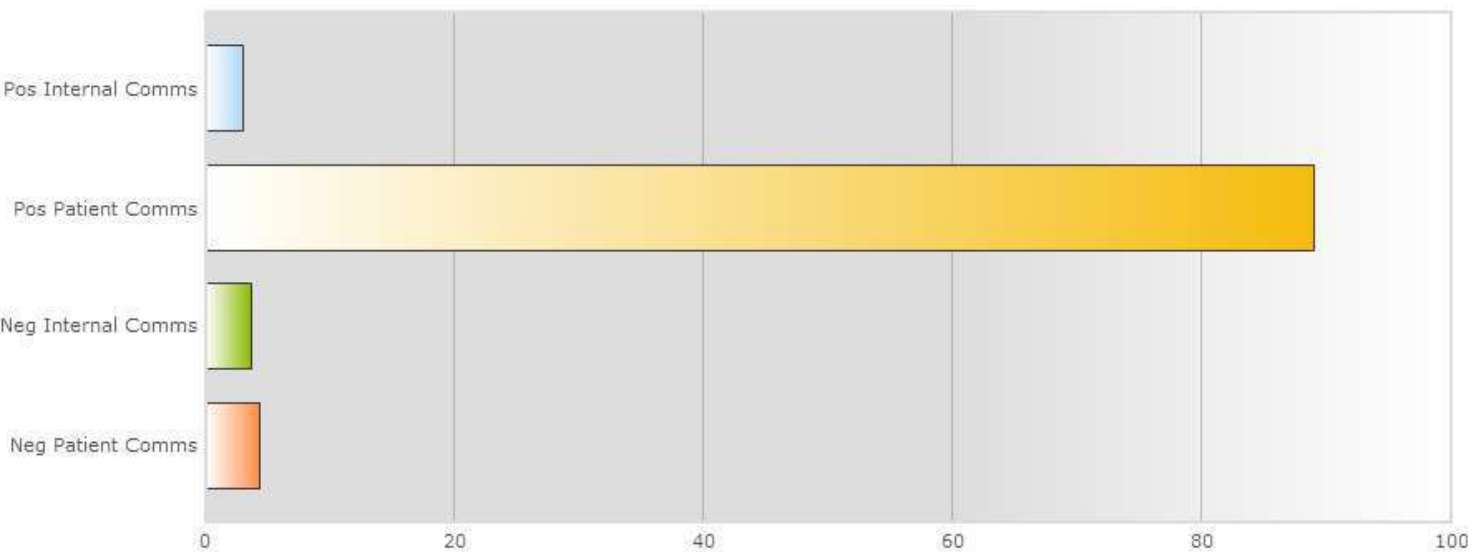
Promoters

MEASURE STAFF COMMUNICATION AND COMPASSION

Patients View of Staff Compassion



Patients View of Communication %





“We’ve Got Your Back”

Chrissan Segaram & Katherine Maka

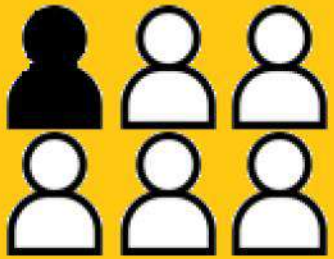


Project Goal

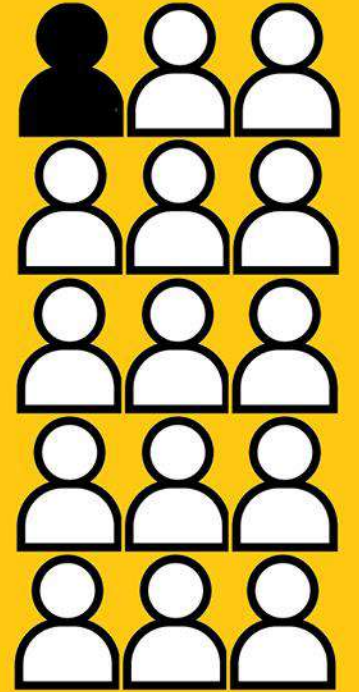
Improve **ACCESS** to care for adult patients with **BACK PAIN** referred to Westmead Hospital Neurosurgical Clinics through a **COST EFFECTIVE PATIENT CENTRED** service by August 2018.

Cut DNA's
Access
Referrals & Triaging
Enhance comms

*"It was a long-time
waiting for an ap-
pointment...I suf-
fered a lot"*



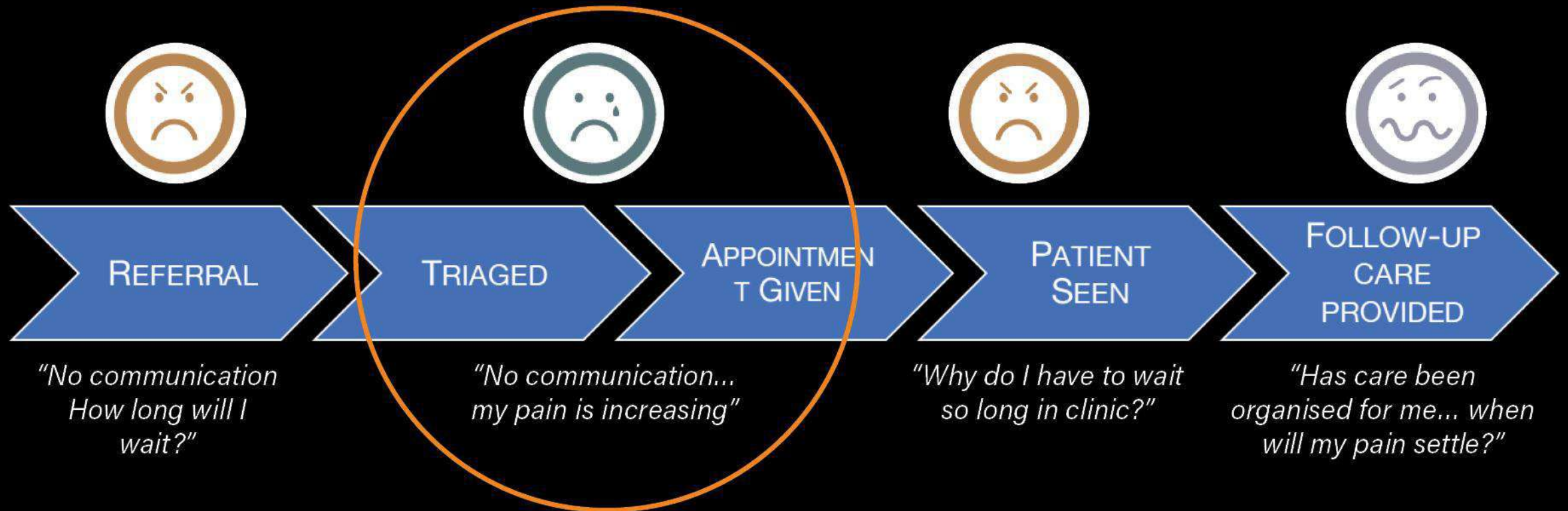
TODAY
1 in 6



2020
1 in 15

Patient Experience – *Current State*

- 62 year old with LBP pain > 2 years
- Currently unable to work
- GP referred to Neurosurgical clinics at Westmead Hospital



Diagnostics Tools - *My Experience Matters*





Key Findings

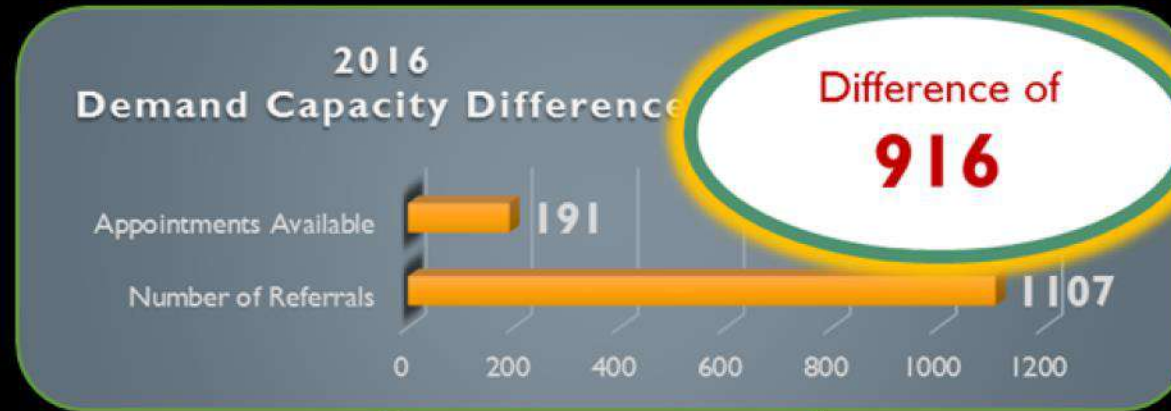
*"I wait for ever...
No customer care...
No one really cares"*

Patient Experience Heat Map

Number of Responses	Kindness & Respect	Involvement in Care	Clear Communication
Pre Implementation	76	60	68
Benchmark	85	85	85



Key Findings



*"9 weeks to be advised...
correspondence
rude"*

5) Cost of DNA
\$400 LOST per 15 min
appointment

2) **15%**
Out of Area

4) **24%**
of patients do not
receive a text
message reminder

3) Only
**1% RECEIVE
LETTER**
for their appointment



Physiotherapy
Led Clinics

Re-Allocation of
Administrative
Staff for Bookings

Solutions

MDT Spinal Case
Conference



PREMS Results – Heat Map

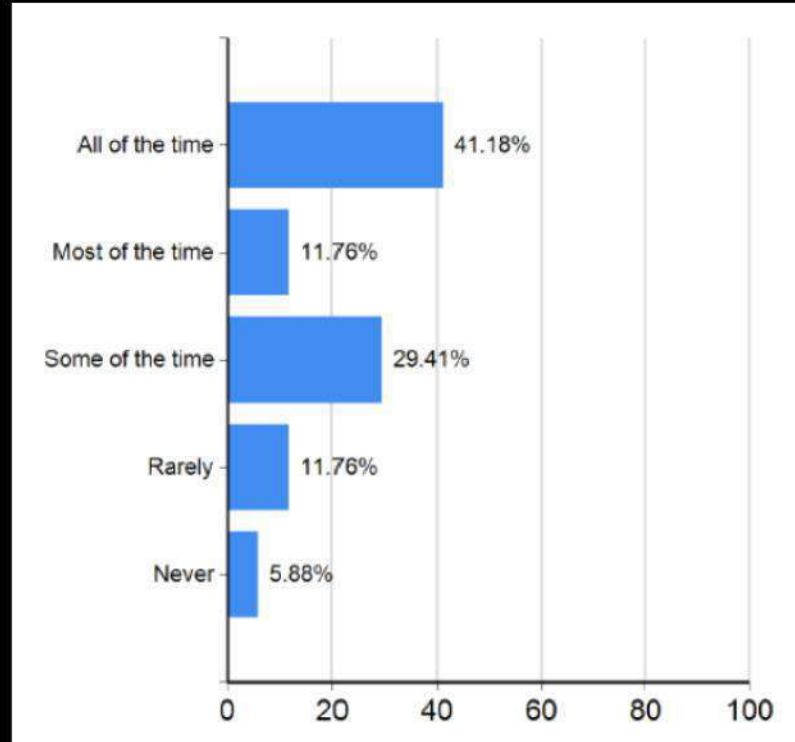
Post Implementation of Solutions *Patient Experience Heat Map*

	Kindness & Respect	Involvement in Care	Clear Communication
September 2017	76	60	68
Benchmark	85	85	85
April 2018	98	97	94
May 2018	87	87	100
June 2018	97	97	97

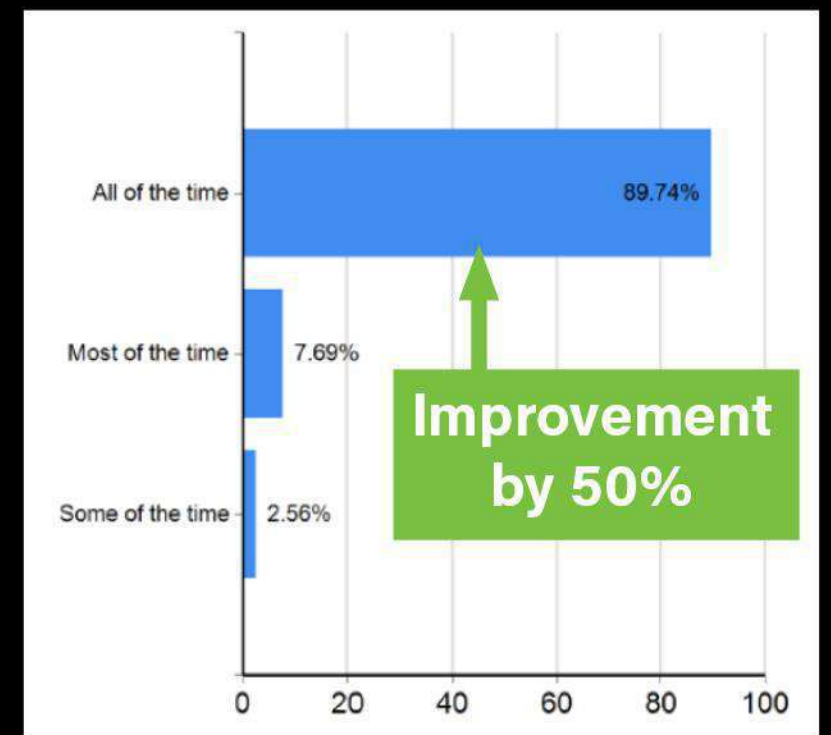
PREMS Results

Questions 5:
Did staff explain things in a way you could understand?

Pre



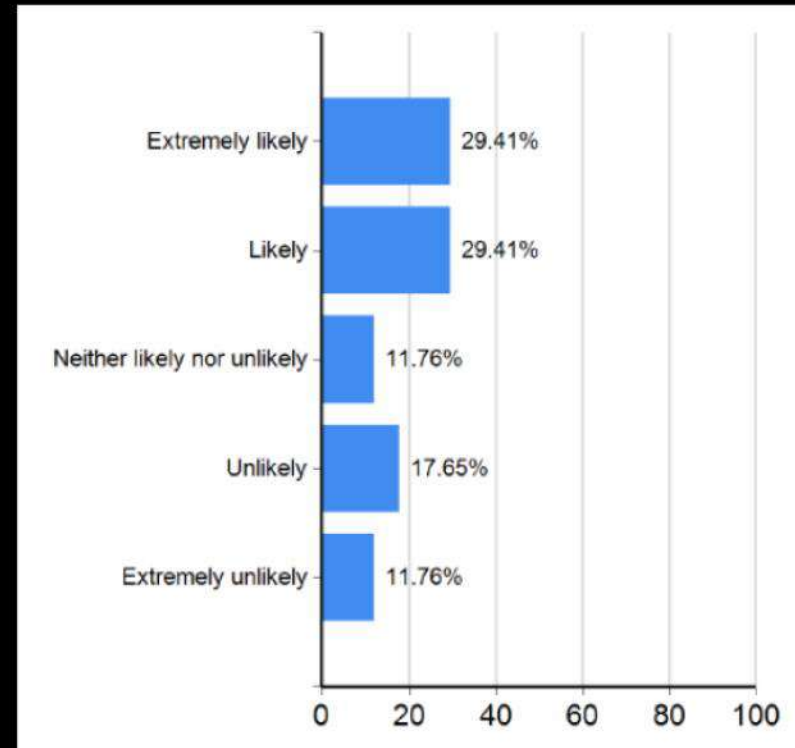
Post



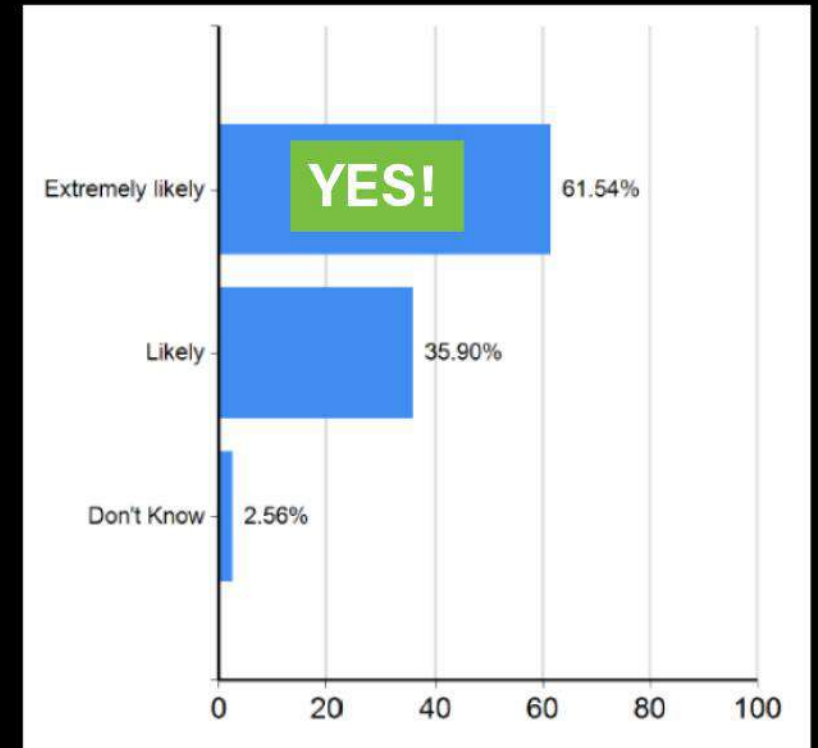
PREMS Results

Questions 7:
How likely
are you to
recommend
the service?

Pre



Post



We

ARE

the patient

experience!

www.thebestexperience.org

Hello, how can I help you?

Type something...

Ask Babylon



Hi Alex, how can I help?

I've got a really bad headache and I don't know what to do...



No problem, let me ask you a few questions



Babylon's interactive symptom checker asks you questions to analyse your condition

Babylon's AI system has been created by experienced doctors and scientists using the latest advances in deep-learning. Much more than a searchable database, it assesses known symptoms and risk factors to provide informed, up-to-date medical information.

Ask Babylon



Students

Our NHS services

What we treat

GP clinic locations

Login

Get Started



Providing NHS services

NHS GP appointments just a tap away*



On mobile in minutes 24/7



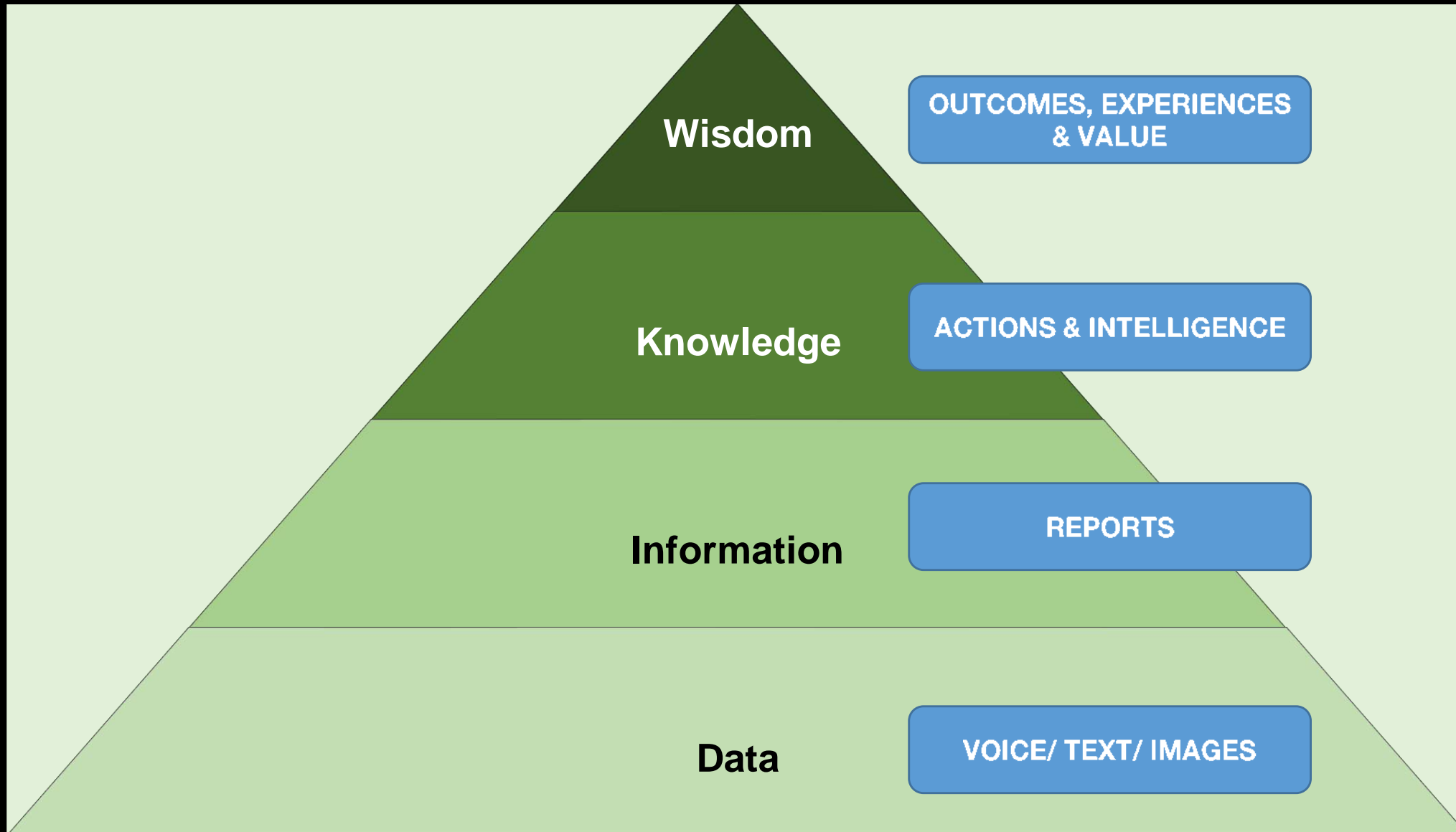
In person at a choice of locations



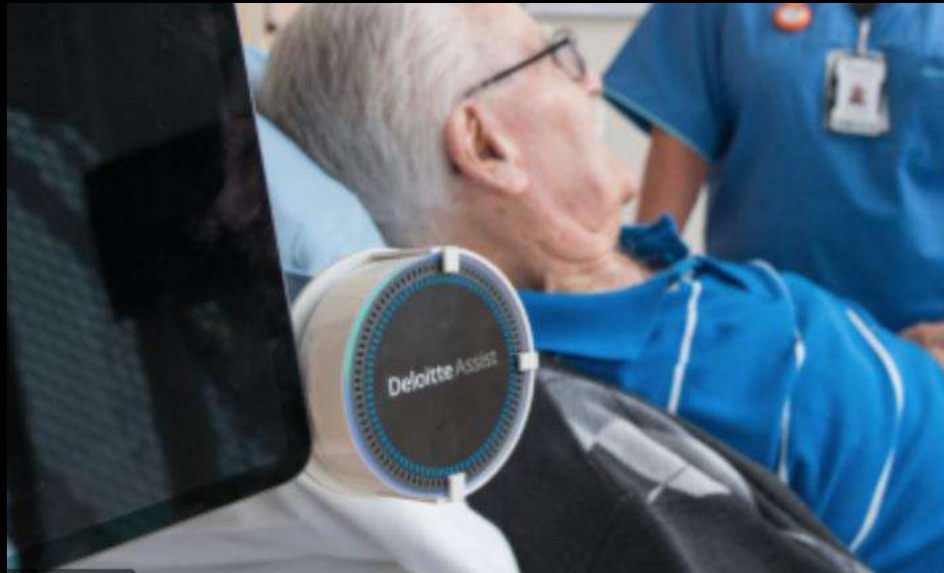
Free digital Healthcheck



TRANSLATE AI DATA TO IMPROVEMENT



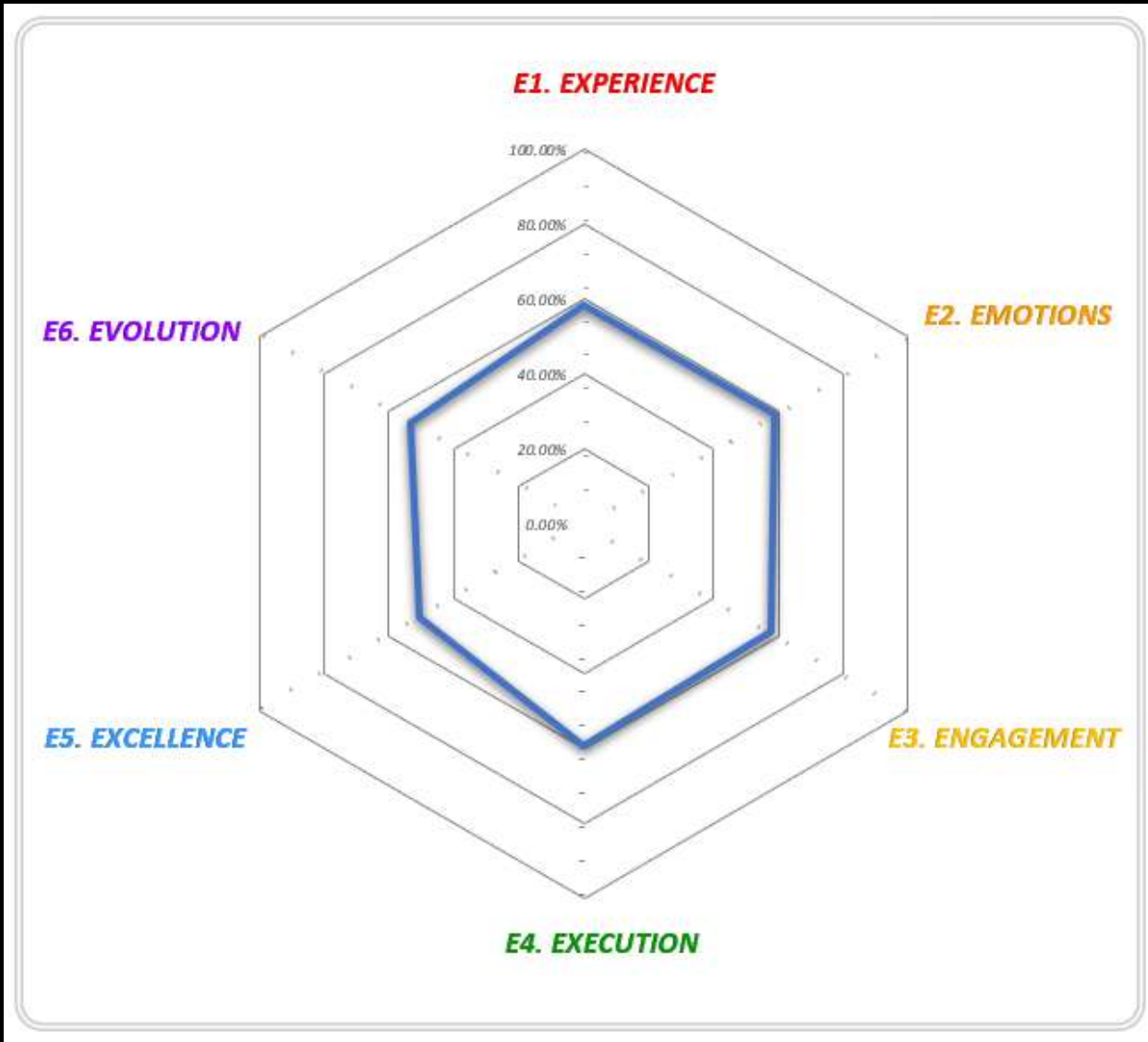
AI ENGINES VS APPICATIONS – NEW ENTRANTS



PXme (PX MATURITY EVALUATION)

0% - 25%	25.01% - 50%	50.01% - 75%	75.01% - 90%	90.01% - 100%
Stage 1: Limited	Stage 2: Ad-Hoc	Stage 3: Organised	Stage 4: Managed	Stage 5: Leaders
<ul style="list-style-type: none"> ➤ No patient feedback ➤ Very limited capability and partnership with consumers ➤ Lack of leadership, structure and KPIs, ➤ Limited staff engagement and training ➤ Undefined complaints processes and service recovery ➤ Few improvements to safety and quality, not focused on PX 	<ul style="list-style-type: none"> ➤ Ad-hoc, basic patient surveys and complaints process ➤ Lack of capability and little partnership with consumers ➤ Some PX initiatives planned but lack of PX leadership and structure, unaligned strategic plan and KPIs, ➤ Insufficient staff engagement and broad training ➤ Few improvements for safety and quality and PX. 	<ul style="list-style-type: none"> ➤ Established survey and complaints process ➤ Some partnership with consumers ➤ PX initiatives planned but requiring formalised PX leadership, structure, & metrics, some targeted training ➤ Some staff engagement and pockets of accountability ➤ Increasing improvements to PX but not hardwired into culture as yet. 	<ul style="list-style-type: none"> ➤ Strong PX measurement platform enabling deep insights that guide targeted improvements, highly defined complaints process ➤ Strong consumer partnership, formalised PX structure and leadership, strategic plan and PX KPIs ➤ High buy-in, staff receive targeted training, are engaged and 'own' the PX. ➤ PX is hardwired into culture and is sustainable 	<ul style="list-style-type: none"> ➤ Strong PX measurement platform enabling deep insights that guide targeted improvements ➤ Industry leaders in PX and consumer partnership, best practice PX structure and highly engaged leadership ➤ Staff are highly skilled in PX and 'own' the PX, with full accountability. ➤ PX is hardwired into culture and improvements are sustainable.

PX MATURITY SCORE



Stage of PX Maturity by E	Score	Stage
E1. EXPERIENCE	58.29%	<i>Organised</i>
E2. EMOTIONS	58.72%	<i>Organised</i>
E3. ENGAGEMENT	57.92%	<i>Organised</i>
E4. EXECUTION	59.47%	<i>Organised</i>
E5. EXCELLENCE	50.45%	<i>Organised</i>
E6. EVOLUTION	53.40%	<i>Organised</i>
OVERALL	56.97%	Organised

- **The Overall PX Maturity Score is 56.97%.**
- **This places the organisation at the Early Organised (Stage 3) stage of maturity.**

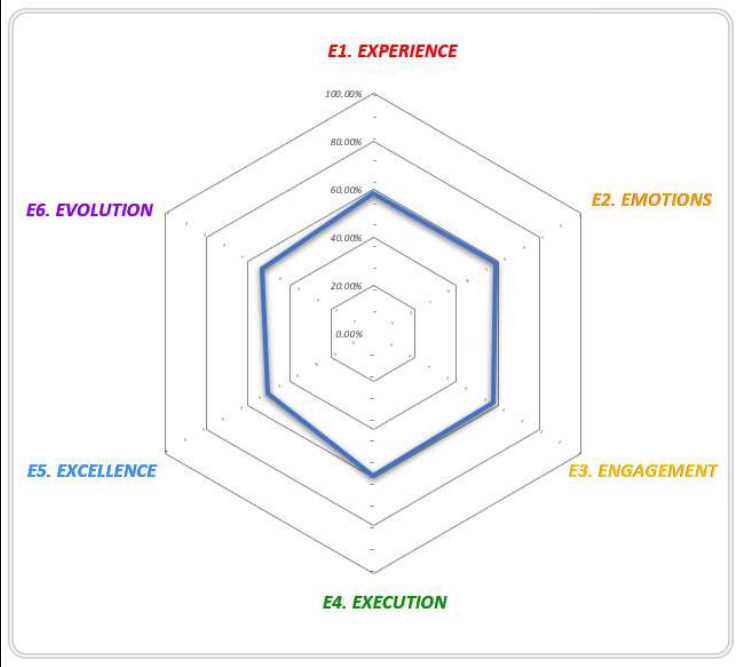
IT RECOMMENDATIONS: MAPS PX GAPS TO APPS



Internet of Things (IoT), Artificial Intelligence (AI),
Augmented & Virtual Reality, Big Data, Blockchain & Mobility



PXme TRIAL OPPORTUNITY



Stage of PX Maturity by E	Score	Stage
E1. EXPERIENCE	58.29%	Organised
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OVERALL	56.97%	Organised



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**What are your feelings
and preferences?**

“Your 1st Partner in Patient Experience”



energesse

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