



Establishing an E-referral Pathway for Acute Neurosurgical Referrals in South Wales

Service Improvement Project
Medical Leadership Programme 2018-19

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The result ?



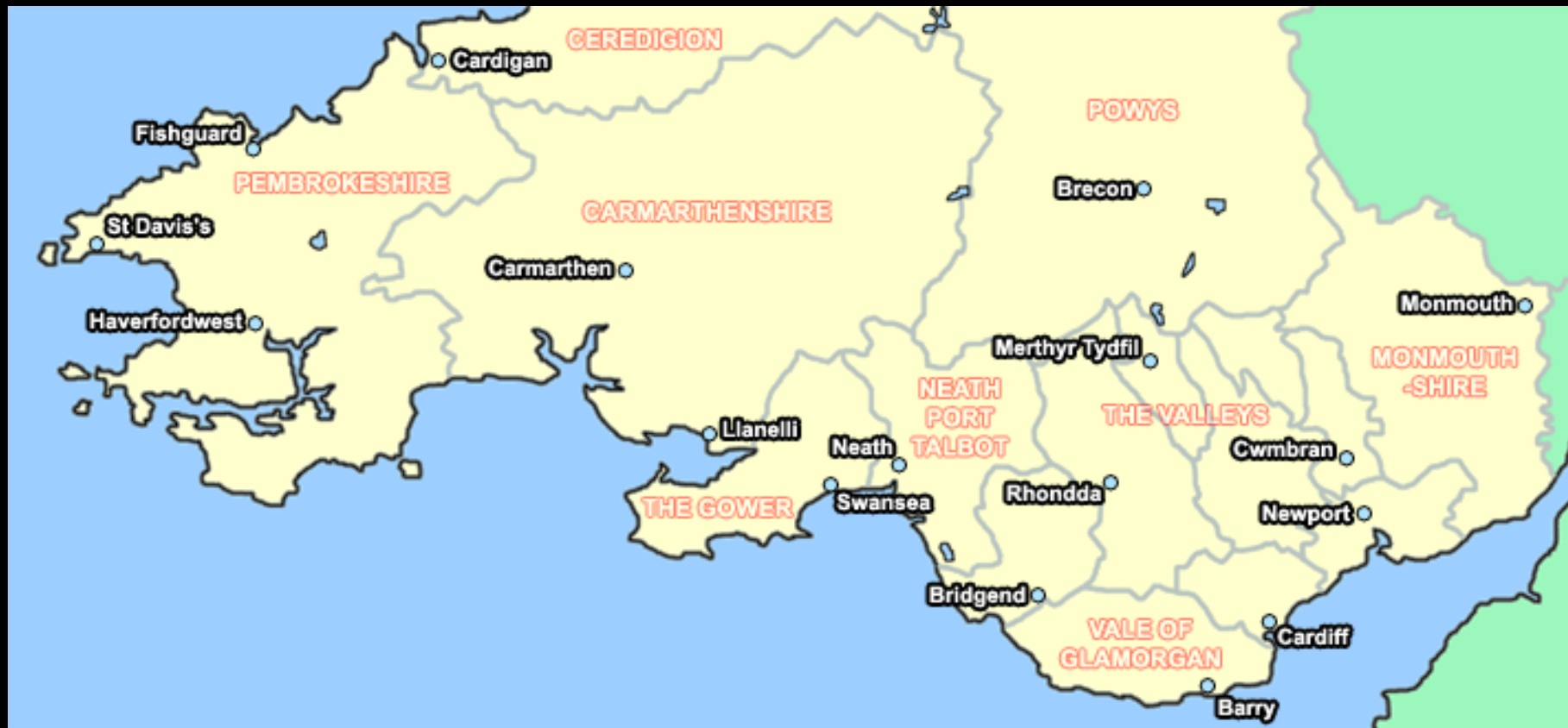
- Evidence of successful neurosurgery from over 6000 years ago



Neurosurgery

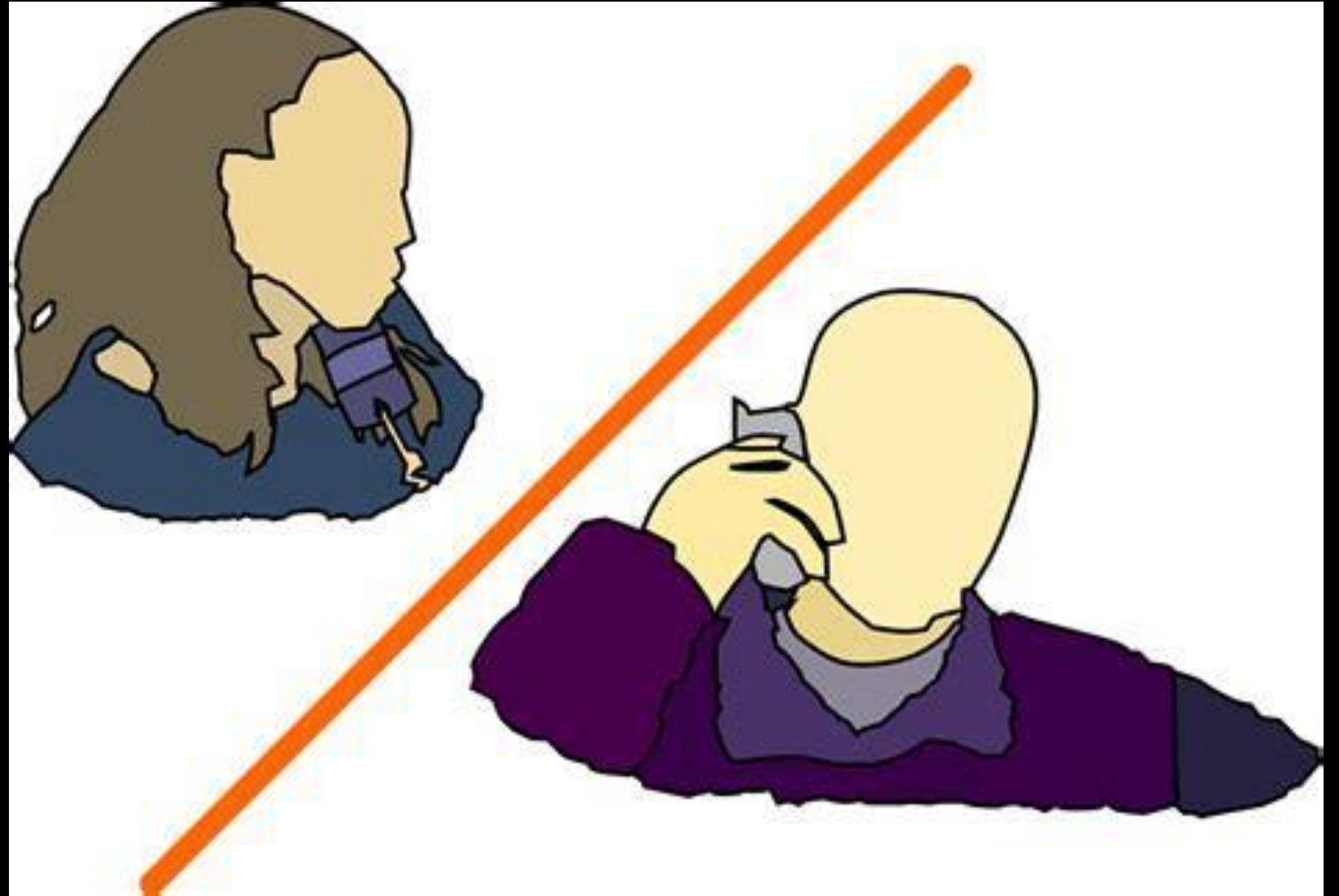
- Brain and Spine
- All ages (1 day old to >100 years)
- Emergency/acute/elective
- Speed of management – life/limb threatening
- Different conditions
 - Trauma
 - Bleeds
 - Tumours
 - Hydrocephalus
 - Spinal cord compression





2.4 million
Over 15 referring hospitals

Referrals to
Neurosurgery



Problems

- Can be slow and inefficient
- No single written record – GMC guidelines
 - GIGO
 - Cannot print into notes/patient records
- Poor communication
- Cannot signpost guidelines/referral pathways
- Not auditable





CORONER'S CONCERNS

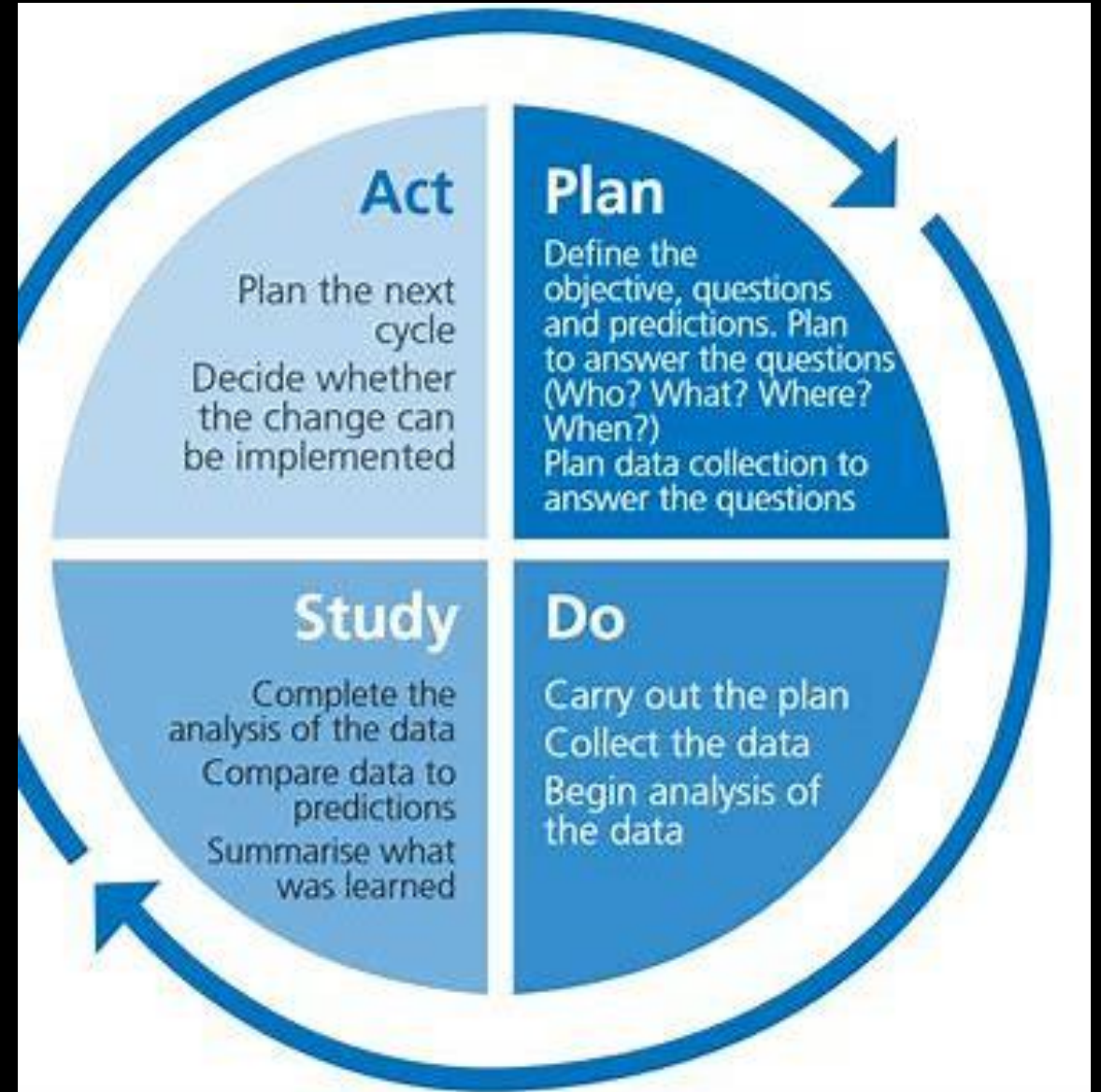
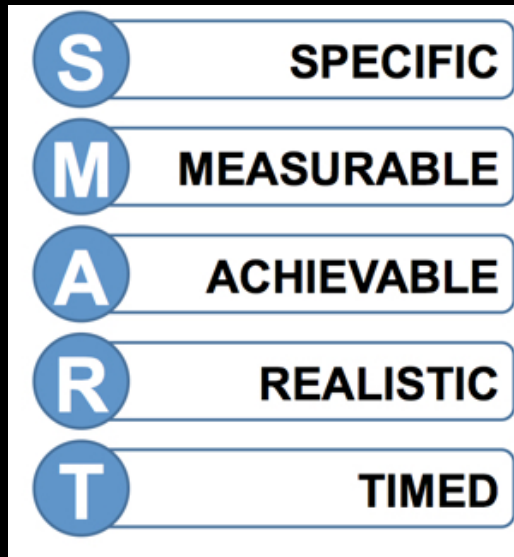
- During the course of the inquest the evidence **revealed matters giving rise to concern**. In my opinion **there is a risk that future deaths will occur** unless action is taken. In the circumstances it is my statutory duty to report to you.

- The MATTERS OF CONCERN are as follows. —

There are a high number of referrals to the single rota'd on-call neurosurgical specialist registrar every day. The **system for making and receiving the referrals is not fit for purpose, with inefficient delays, microcommunications and confusion occurring**. The use of the UHW switchboard and bleeping the doctor is archaic, and does not utilize technology as it should. Further, if the on-call doctor is in surgery or dealing with an emergency, there is no back up doctor to field the referrals, which can often be time critical.

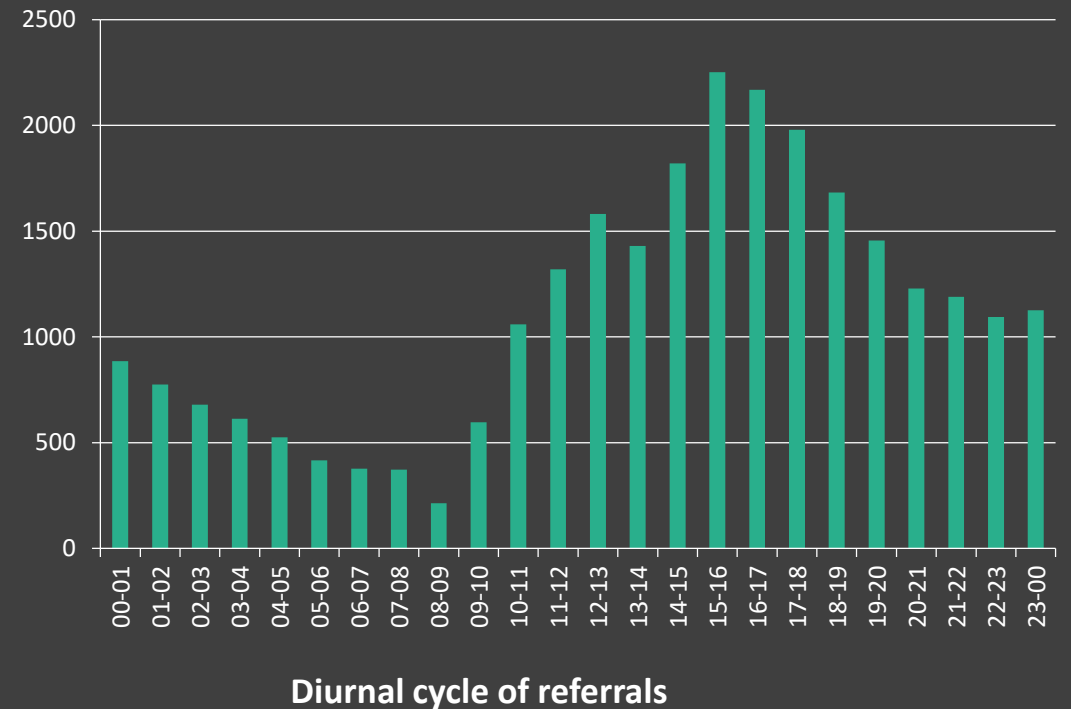
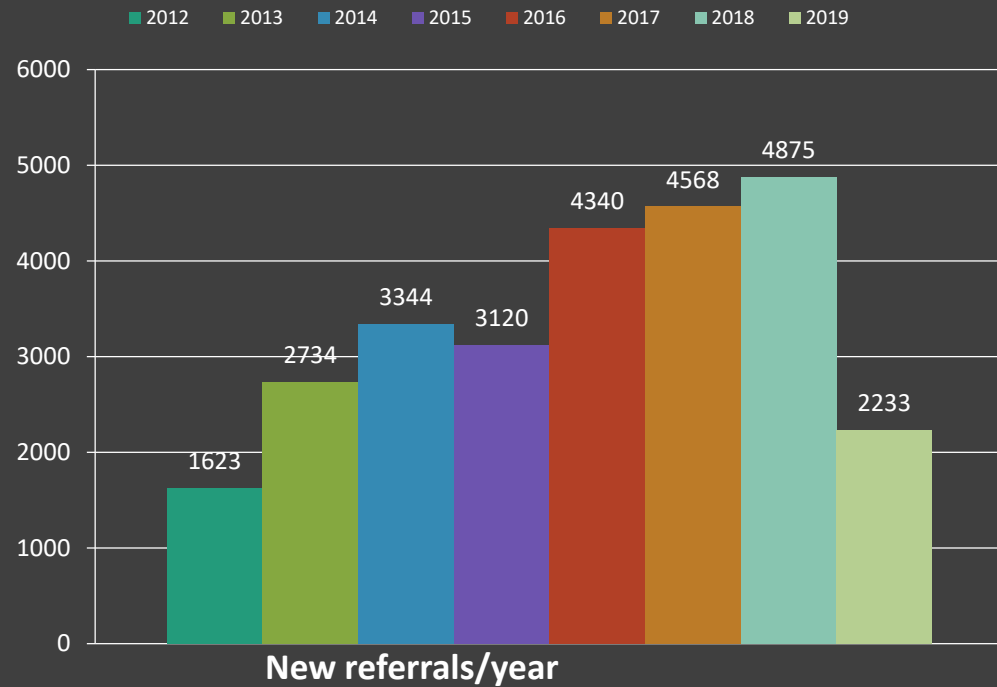
The project

- Implement an online referral system for acute neurosurgical patients in South Wales

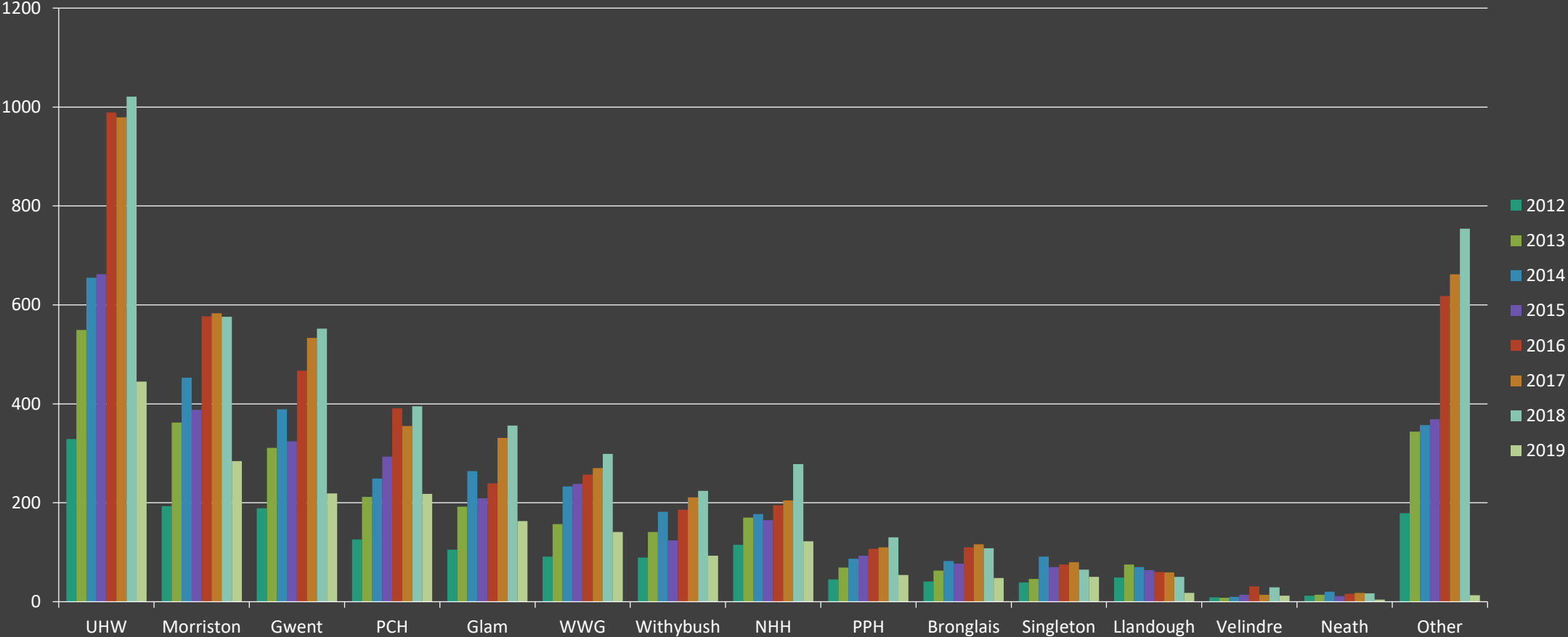


Database analysed

- Jan 2012 – Jun 2019 (26,924 total)

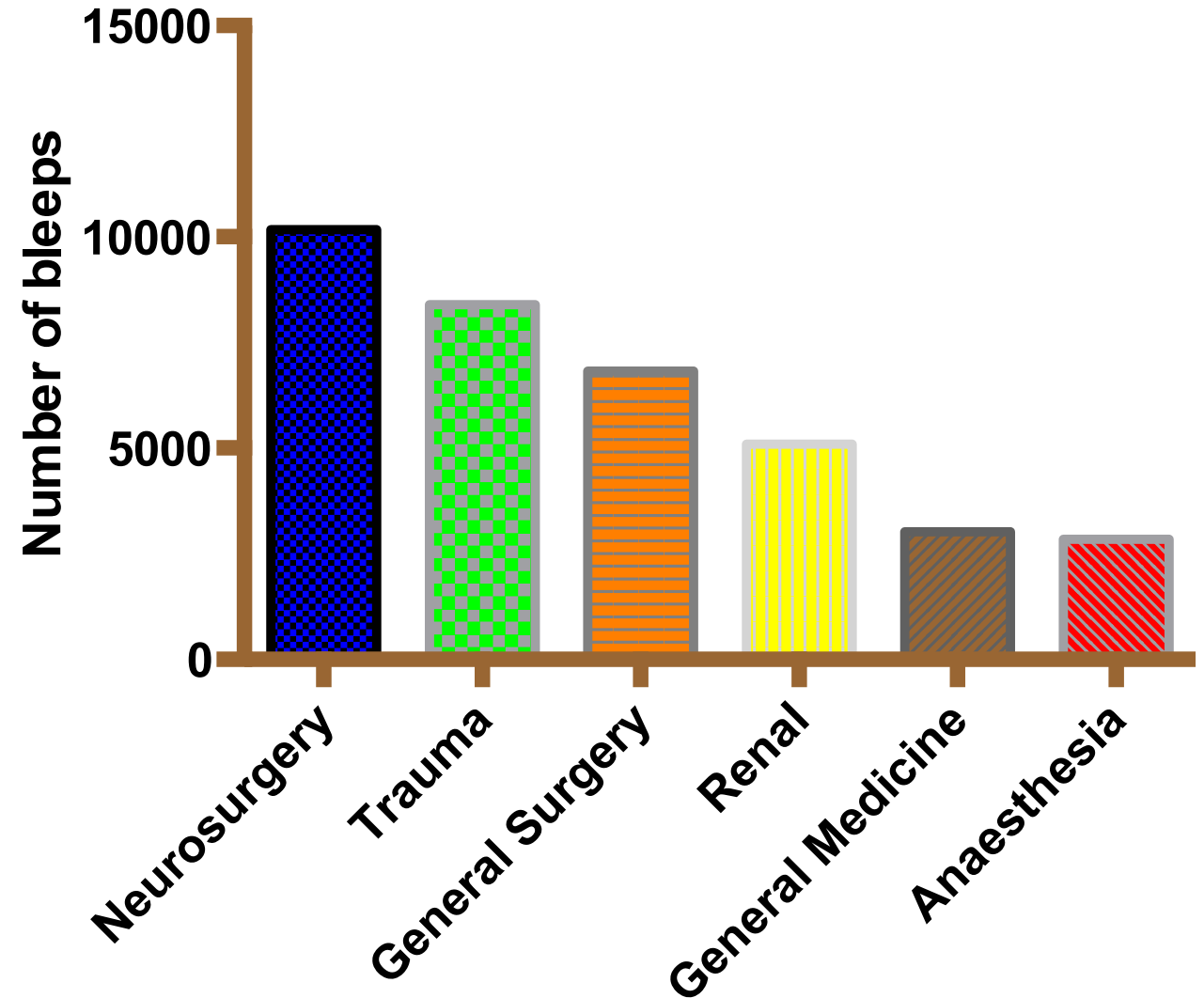


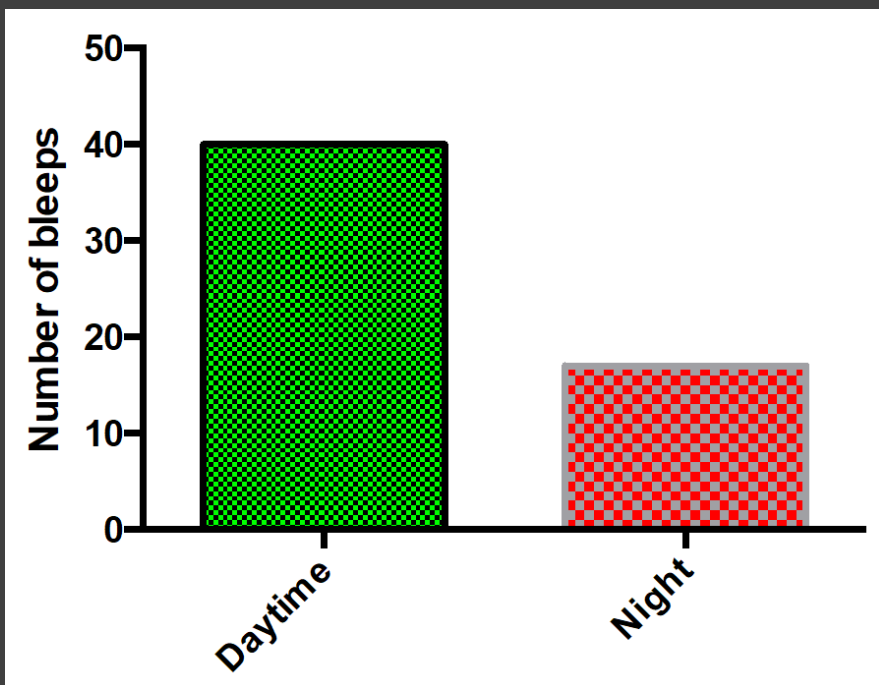
Referrals by region



Neurosurgical bleep

- A retrospective analysis of electronic hospital bleep records (switch) (March-September 2015).
- Bleep logs were retrieved from the hospital paging system.





Average 57/day



23/09/2015 14:49:39	6464	46481-	Normal	0	446	Receiver type 1	x6146 (UHW) 10610
23/09/2015 14:54:02	6464	45192	✓ Normal	0	446	Receiver type 1	x6035 (UHW) 10608
23/09/2015 14:56:03	6464	46400	✓ Normal	0	446	Receiver type 1	x6042 (UHW) 10609
23/09/2015 14:57:38	6464	45192	✓ Normal	0	446	Receiver type 1	x6035 (UHW) 10608
23/09/2015 14:58:15	6464	46400	✓ Normal	0	446	Receiver type 1	x6035 (UHW) 10608
23/09/2015 15:01:13	6464	45192	✓ Normal	0	446	Receiver type 1	x6146 (UHW) 10610
23/09/2015 15:01:51	6464	41478	✓ Normal	0	446	Receiver type 1	x6042 (UHW) 10609
23/09/2015 15:06:07	6464	41478	✓ Normal	0	446	Receiver type 1	x6146 (UHW) 10610
23/09/2015 15:10:00	6464	41488	✓ Normal	0	446	Receiver type 1	x6146 (UHW) 10610
23/09/2015 15:10:00	6464	46400	✓ Normal	0	446	Receiver type 1	x6146 (UHW) 10610

Do



Defined stakeholders



Stakeholder mapping



Brainstorming workshop



Set parameters of requirement



Survey of other Neurosurgical units

Literature search

Study



Two commercial
platforms available

Refer-a-patient
NORSE



Invited to a
presentation

All stake holders
invited
Option appraisal



Business case to
Clinical Board

Cost

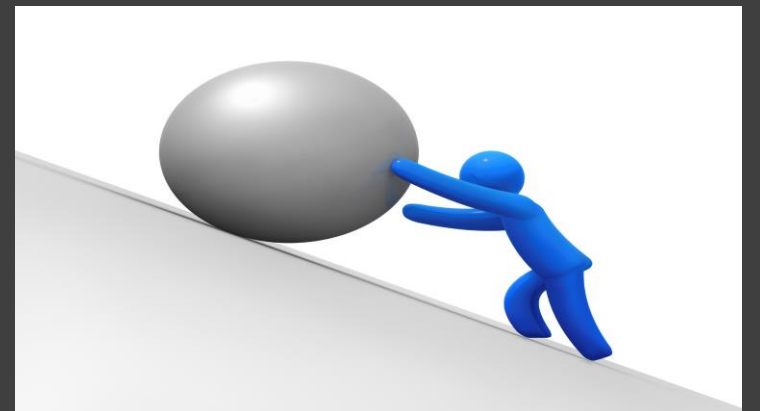
NHS Wales IT guidelines

- All systems to link in with NWIS /WCP
- Server to be in Wales - GDPR





Act





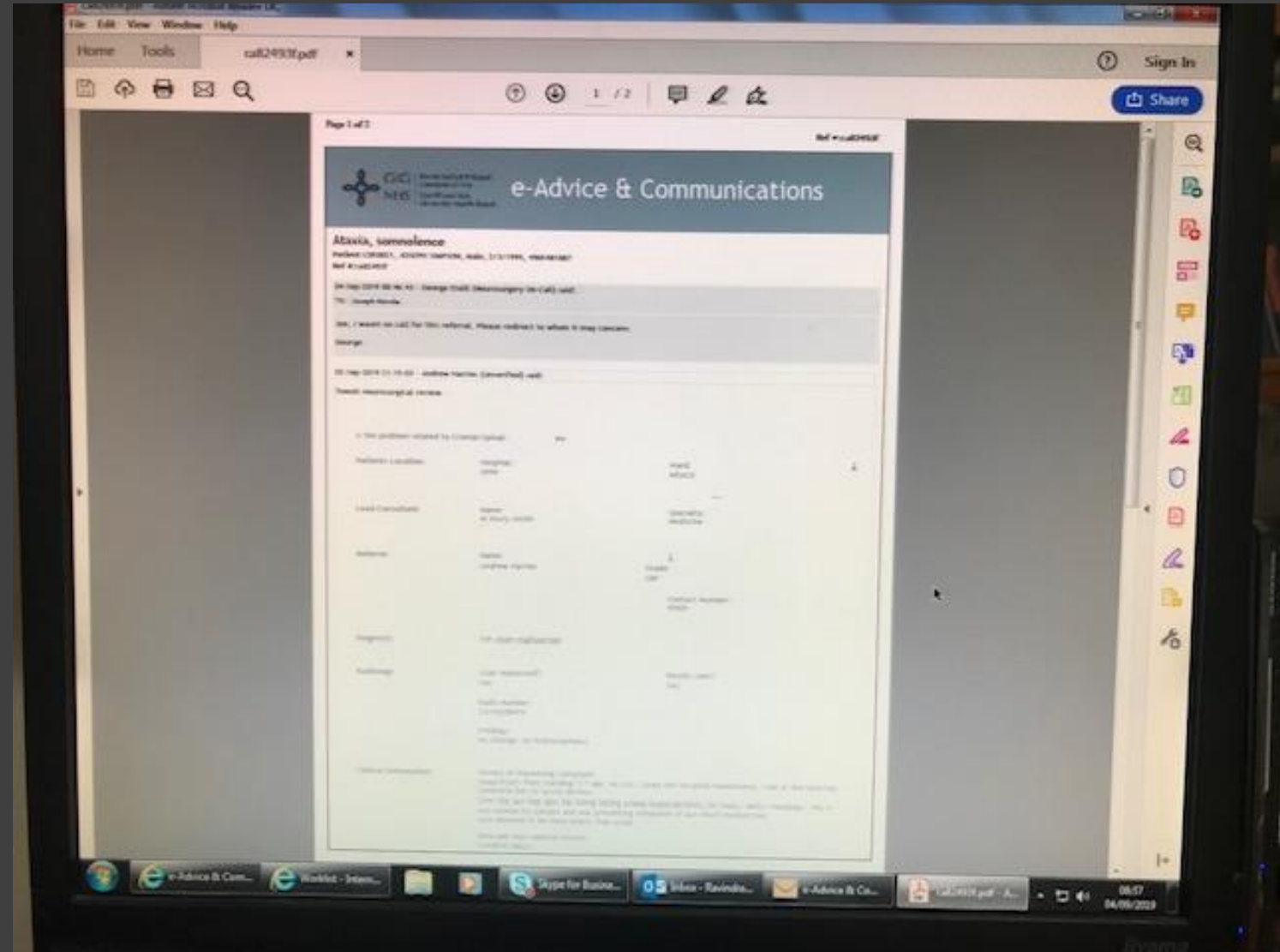
IT Department

- Technical Challenge
- Need for the project
- Need for an innovative solution
- Could form pilot for their larger project

-
- Small team
 - Close cooperation
 - Clear requirements
 - Open access
 - Regular meetings and feedback to department



- Multiple iterations
- Presented at Departmental and Directorate meetings
- Beta testing



https://canada.cerner.com/Dialogues/View.aspx?Dialogid=ca2858

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Web Slice Gallery

ARCHIVE

SEARCH

IN REPORTS

PROFILE

HELP

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02 Sep 2019 21:15:03 - Andrew Harris (Unverified) said:

Needs neurosurgical review

Is the problem related to Crania/Spinat: No

Patient's Location: Hospital: I&HW Ward: HEACU

Lead Consultant: Name: M Drury Smith Specialty: Medicine

Referrer: Name: Andrew Harris Grade: C&P Contact Number: 47825

Diagnosis: ICP shunt malfunction

Radiology: Scan requested?: Yes Results sent?: Yes
Radio Number: CA14290478
Findings: no change, no hydrocephalus

Clinical Information: History of Presenting Complaint:
Head injury from standing 7/7 ago. No LOC. Large left occipital haematoma.
Scan at the time out complete but not acute obvious.
Over the last few days has been falling asleep inappropriately (in meals, whilst standing) - this is not normal for patient and was presenting complaint of left shunt malfunction.
Also deemed to be more alert than usual.
Relevant Past Medical History:
Cerebral palsy
VP shunt following haemorrhage
Epilepsy
Examination:
uncoordinated gait with hydrocephalus (none for patient)
Otherwise normal cranial nerves.

08:08 04/09/2019

FILE MESSAGE



Wed 04/09/2019 06:09

eCommunications <no-reply.eCommunications.CAV@wales.nhs.uk>

e-Advice & Communications Mailbox Count

To: [Kavinda Ramagopani \(Cardiff and Vale UHB - Newswings\)](#)

If there are problems with how this message is displayed, click here to view it in a web browser.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.



e-Advice & Communications

Daily Mailbox Count

Dear Kavinda,

Your mailbox counts, as of 06:00 on 04 Sep 2019, are:

Mailbox Name	Staging Count	Oldest Message
Newswings On-Call	2	02 Sep 2019 21:15

Regards,

The e-Advice & Communications Project Team



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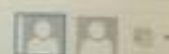
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If you need to contact the e-Advice & Communications project team please email eCommunications.CAV@wales.nhs.uk.

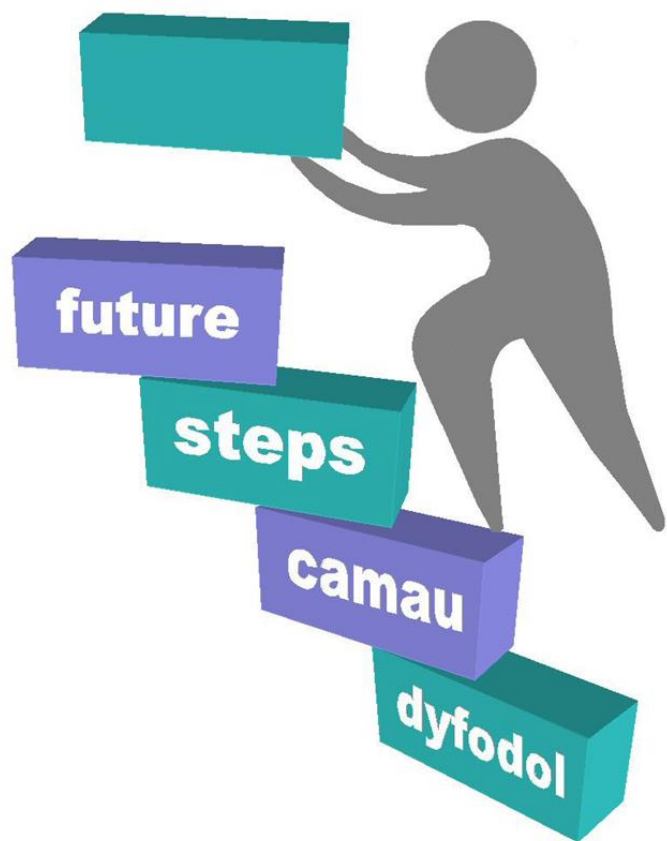
eCommunications

There are no items to share in this view



Pilot

- Late August
- Cardiff & Vale University Health Board
- Weekly updates
- Further modifications



- External Pilot
 - Early October
 - Royal Glamorgan Hospital
- South Wales Roll out
 - Mid Nov onwards
 - Education
 - Video
- Full implementation
 - ? Jan 2020

What did I learn

- Be prepared for the curveball
- Ask for help
- Team working is essential
- Lead from behind
- Inspire the team
- Tell people what to do, don't tell them how to do it

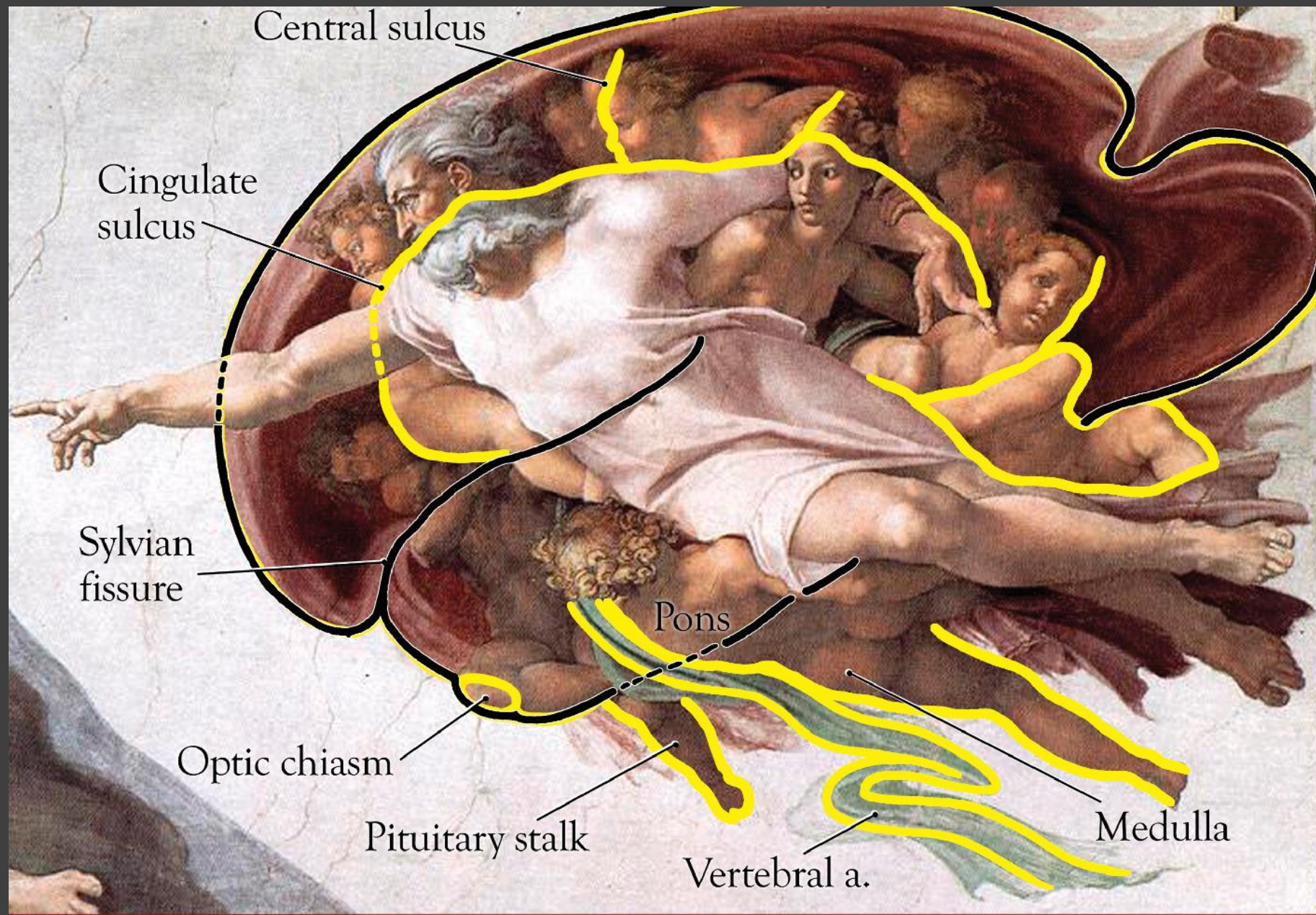


Kotter's model works



Know yourself - I am a

- BELBIN Plant, Team worker, Resource Investigator not a Completer Finisher
- MBTI – INTJ - Introversion, Intuition, Thinking, Judging
- Mentally tough - Four Cs –Commitment, Control, Challenge and Confidence
- Leadership style – Visionary, Affiliative and Participative
- 360° Individual report of Healthcare Leadership Model





Thank you