

LESSONS FROM...

# ACUTE KIDNEY INJURY



## INTRODUCTION



DR TOM BLAKEMAN  
RCGP CHAMPION FOR AKI!

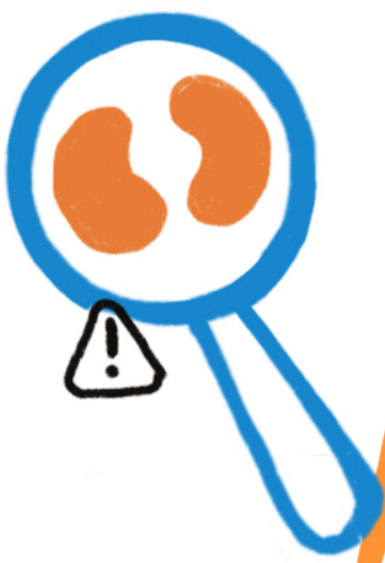
- AKI IS ASSOCIATED WITH POOR PATIENT OUTCOMES
- AKI IS COMMON & A POWERFUL MARKER FOR HIGH RISK



THIS A ONE YEAR RCGP AKI QUALITY IMPROVEMENT PROJECT

THIS IS THE LEARNING & DIAGNOSTIC PHASE OF THE PROJECT

AKI CAN BE USED AS A LENS TO LEARN WAYS TO IMPROVE SAFETY AND QUALITY OF CARE FOR PATIENTS WITH COMPLEX HEALTH & CARE NEEDS



## TODAY HAS 2 PARTS

- PROBLEM & DIAGNOSTIC PHASE  
UNDERSTANDING THE PROBLEM
- HOW DO WE TAKE THINGS FORWARD?



## WORK TO DATE & CHALLENGES AHEAD

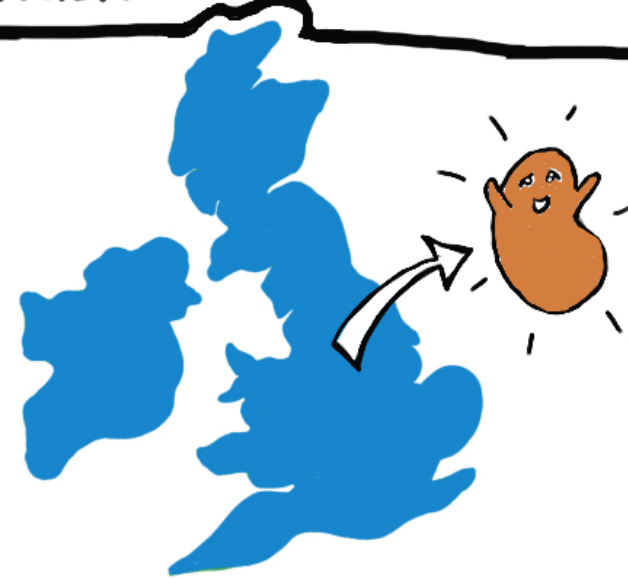


DR CHARLES TOMSON  
RENAL CONS @ NEWCASTLE

THE 'THINK KIDNEYS' AKI PROGRAMME IS A FANTASTICALLY AMBITIOUS PROGRAMME AIMING TO CHANGE THE OUTCOMES OF AKI IN ENGLAND.

BUT... THE COMMONEST CAUSE OF READMISSION AFTER AKI MEDICATIONS ARE STOPPED → PULMONARY OEDEMA

THIS HIGHLIGHTS THE NEED TO COMMUNICATE WHEN TO RESTART MEDICATION!



THE DRUGS USUALLY STOPPED ARE ACEI/ARBs/METFORMIN... BUT OFTEN MANY OTHER DRUGS CAN ACCUMULATE!

SICK DAY RULES ARE CONTROVERSIAL...

THERE'S LITTLE EVIDENCE

READ BMJ OPEN ARTICLE BEFORE IMPLEMENTING SICK DAY RULES IN YOUR AREA



CHALLENGES: WE NEED TO AVOID ALERT FATIGUE!  
THERE IS COMPLEX SOCIAL SCIENCE BEHIND THIS!



# LESSONS FROM... ACUTE KIDNEY INJURY 2



## QUALITY IMPROVEMENT IN AKI: UNDERSTANDING THE PROBLEM

THERE ARE DIFFERENT SORTS OF PROBLEMS FACED IN QI...

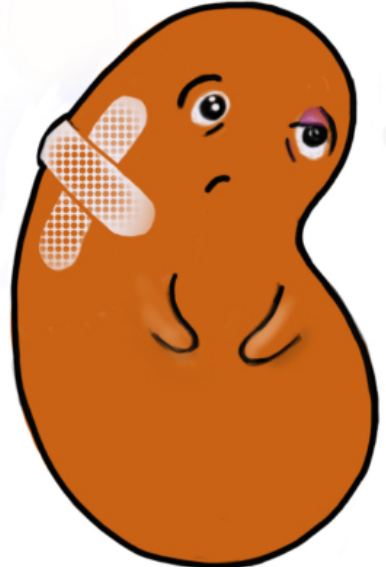
DR JOANNA BIRCHER  
LEAD FOR QUALITY IMPROVEMENT  
TAMESIDE & GLASGOW CCG

COMPLICATED PROBLEMS

v2

COMPLEX PROBLEMS

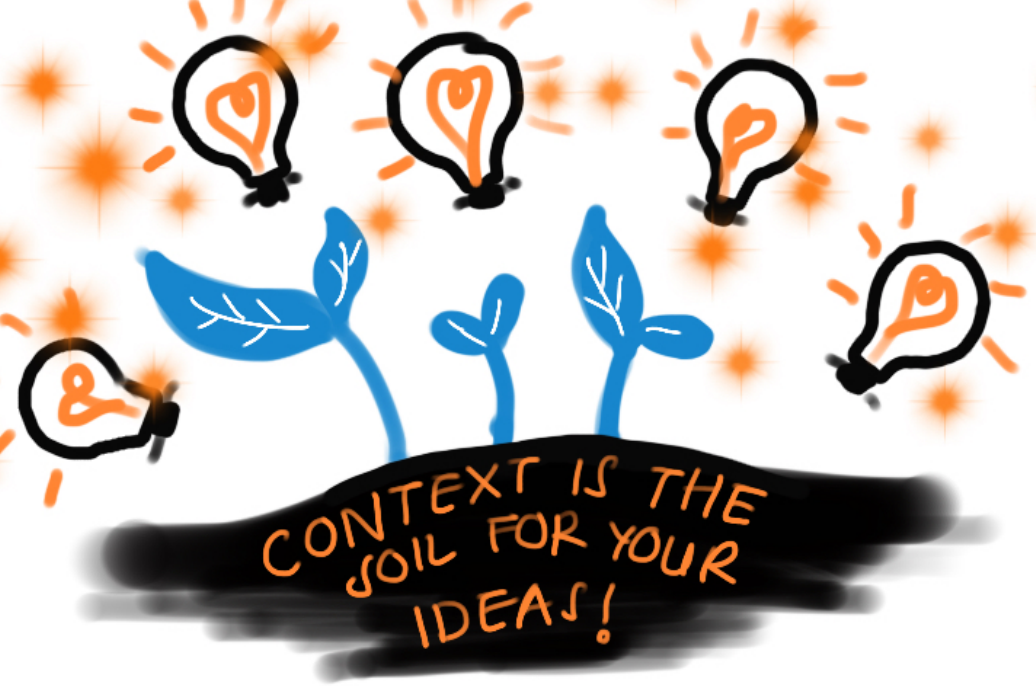
TRYING TO LAUNCH A SPACE ROCKET. THE COMPONENTS ARE 'COMPLICATED', BUT YOU CAN LEARN THESE COMPONENTS...  
... LIKE RAISING A CHILD! THERE'S ALL SORT OF FACTORS INVOLVED



AKI IS A COMPLEX PROBLEM!

TO TACKLE IT WE MUST TAKE INTO ACCOUNT THE LOCAL CONTEXT. ONE SIZE WILL NOT FIT ALL.

WE ARE ALL HERE TODAY TO GET A SHARED UNDERSTANDING OF A PROBLEM, AND HOW WE CAN COME TOGETHER TO SOLVE THESE PROBLEMS!





# LESSONS FROM... ACUTE KIDNEY INJURY



## CASE PRESENTATIONS

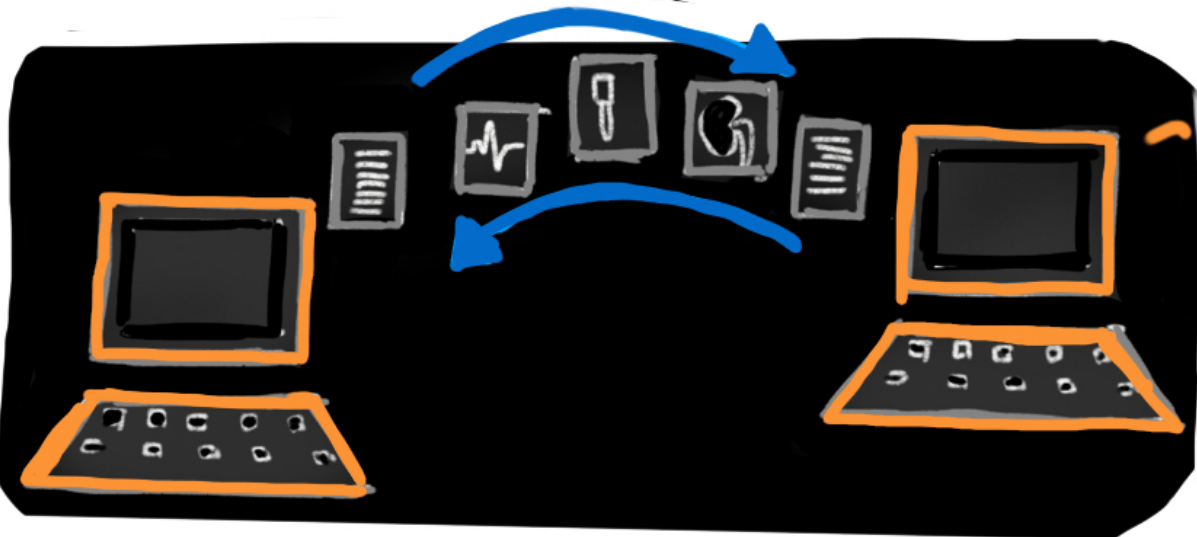
**DR ALISON RIMMER**  
BURY GP



WITH NO CLINICAL CONTEXT

THIS PATIENT IS KNOWN TO OFTEN NOT ANSWER...

USING ENRICHED SUMMARY CARE RECORDS IS VITAL



**DR HELEN FINNAMORE**  
GPST3 SEDGEFIELD

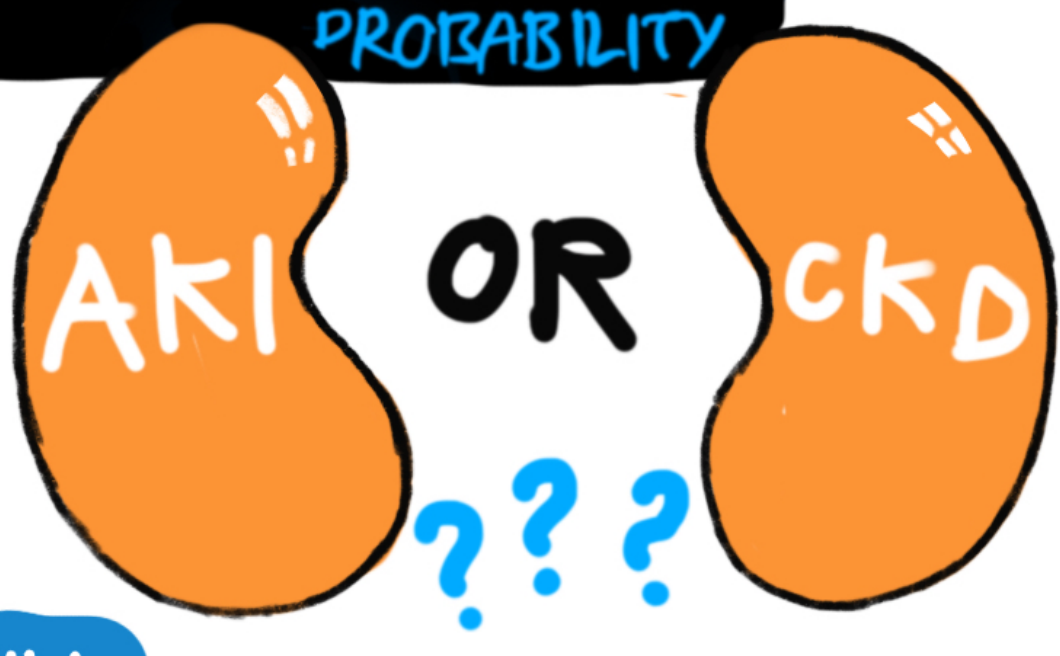
EXAMPLE OF A PATIENT ADMITTED WITH 'AKI'

Cr 382 ..... DISCHARGED 390!

BASELINE Cr USUALLY 350-400!

EXAMPLE OF A FARMER Cr 850!

BASELINE BLOOD 1 YEAR AGO  
DIFFICULT TO PREDICT PRE-TEST PROBABILITY



IT'S NOT ALWAYS POSSIBLE TO SAY!

**DR DUNCAN HILL**  
GP, MANCHESTER

HOSPITAL DISCHARGE SUMMARY

AKI MENTIONED BUT NOT CODED...



MEDICATIONS STOPPED 'GP TO FOLLOW UP'  
-NEW- MEDICATION PRESCRIBED... BUT NOT DISPENSED

GP PRACTICE...

- NO PLAN FOR AKI DISCHARGE
- POOR CODING & LACK OF STRUCTURE FOR COMMUNITY FOLLOW UP

IMPROVE WORKFLOW

CODING TEAM

PRACTICE PHARMACIST TO REVIEWS MEDS

BOOK PATIENTS FOR 1 WEEK F/U FOR BP + BLOODS

GP APPT WITH RESULTS

PROVIDE SICK DAY RULES CARD

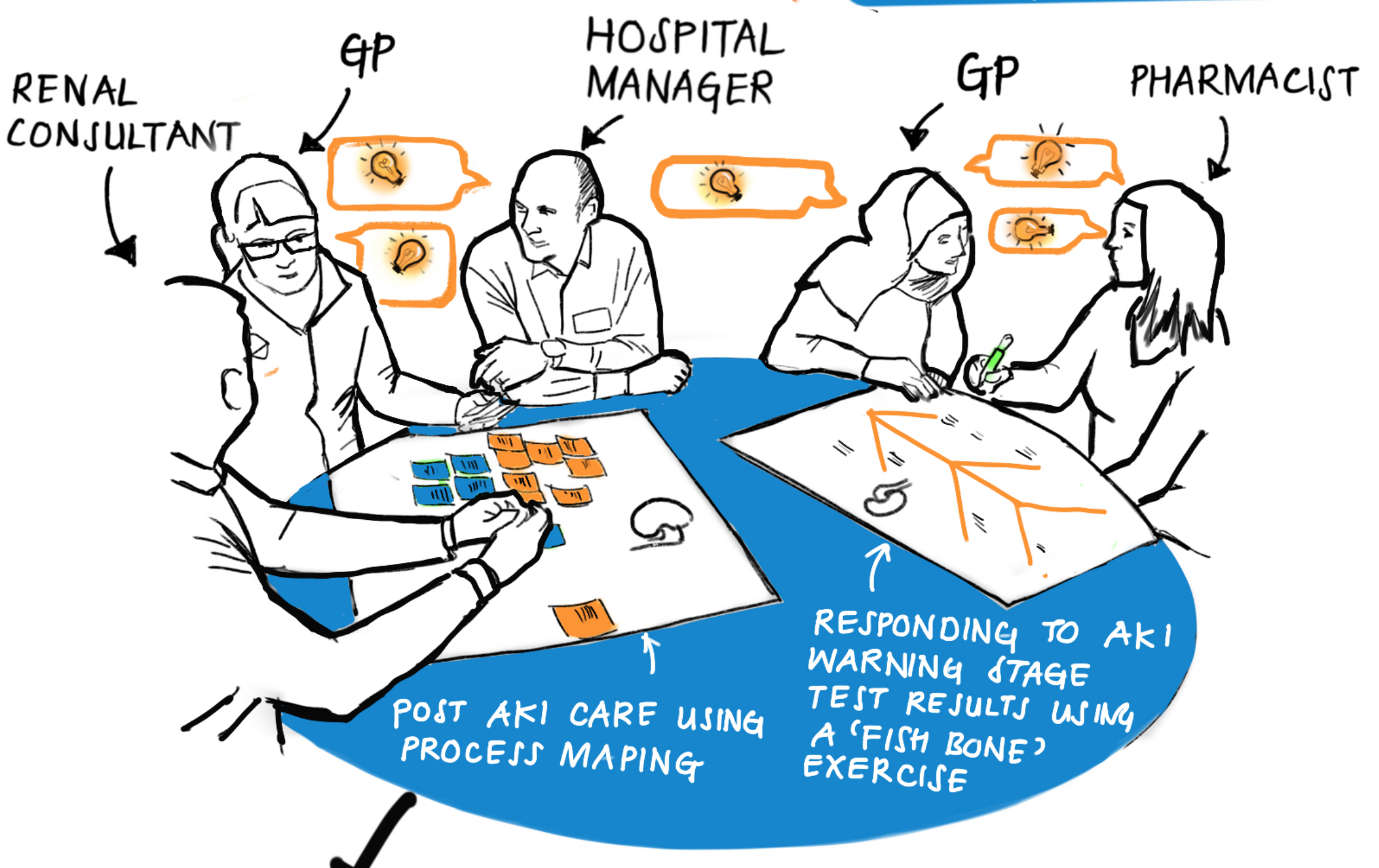


# LESSONS FROM... ACUTE KIDNEY INJURY

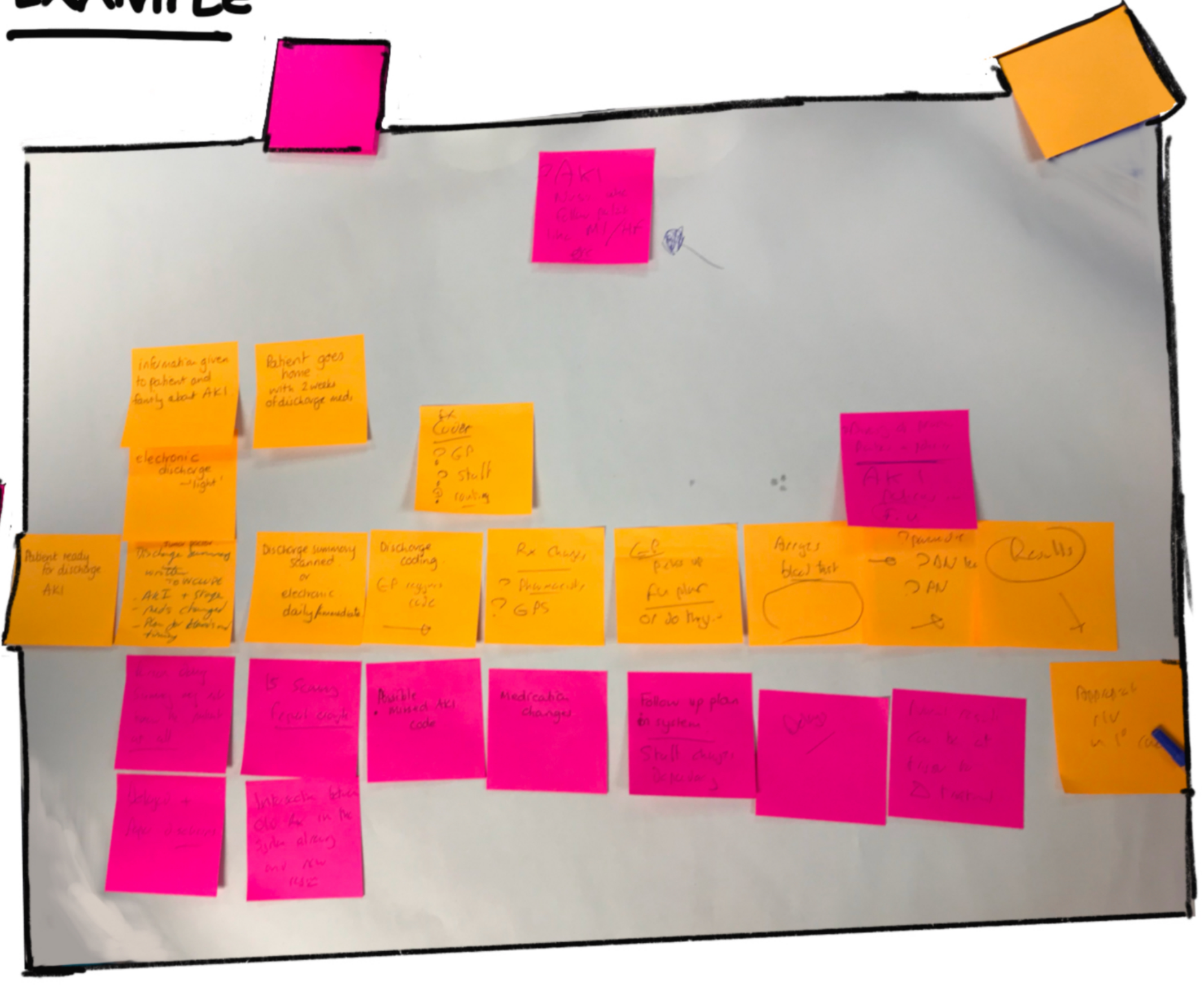


## UNDERSTANDING THE PROBLEM ROUNDTABLE DISCUSSIONS

DR JOANNA BIRCHER  
LEAD FOR QUALITY IMPROVEMENT  
TAMESIDE & GLOUCESTER CC&G



### EXAMPLE

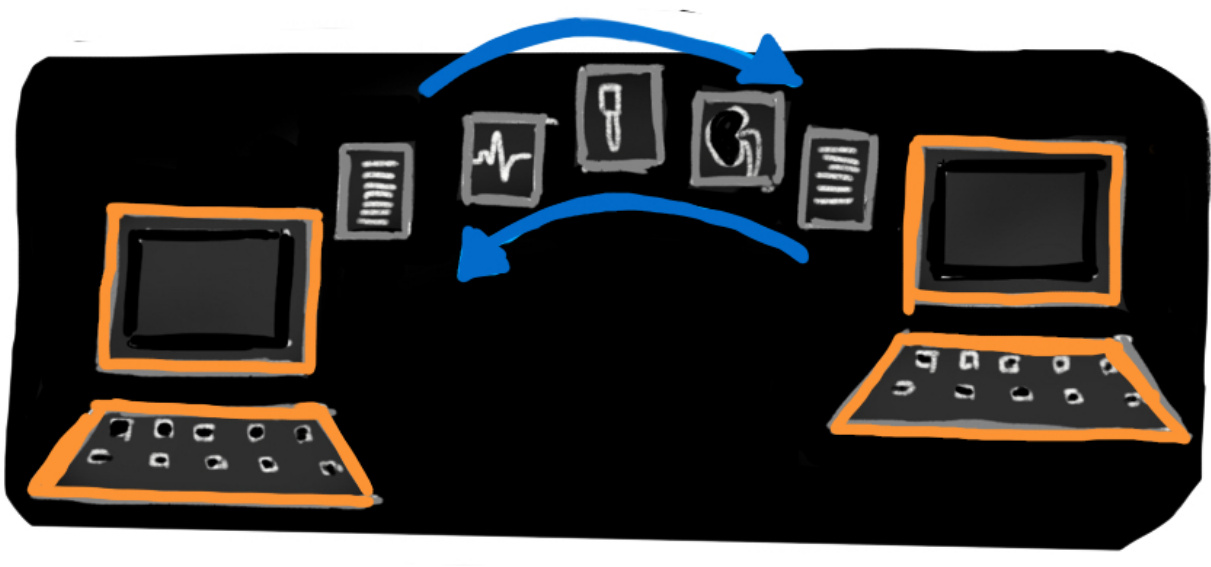




# LESSONS FROM... ACUTE KIDNEY INJURY



JO WOOKEY - PROGRAMME MANAGER  
DETERIORATING PATIENT, KSSAHJN



CARE-FLOW CONNECT

EXAMPLE OF SECONDARY CARE CLOUD MODEL

↓ REDUCES NUMBERS OF HANDOVERS



💡 ? INCLUDE PRIMARY CARE IN THE FUTURE  
ALLOW INTERACTIONS BETWEEN SERVICES

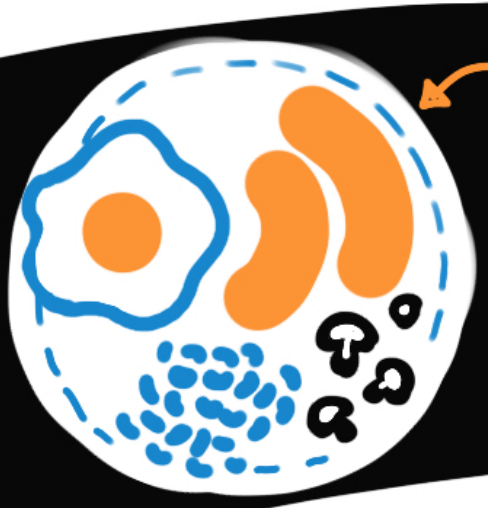
TONY TETLOW  
CONSULTANT CLINICAL SCIENTIST

← TAMESIDE CUP TO ROLL OUT AKI ALERTS!

## INTRODUCTION OF AKI DETECTION SOFTWARE

↓ POSSIBILITIES, STRENGTHS & PITFALLS...

AKA TALES OF A CATIOUS BIOCHEMIST



MEALS/DIET CAN IMPACT CREATININE!

IF STAGE 1 ALERT RAISED...

CONSIDER REPEATING RENAL FUNCTION FASTING!

## SOFTWARE ALGORITHM...

- LOOKS FOR CR IN PREVIOUS 7 DAYS... IF NONE... PREVIOUS 365 DAYS!
- LOOKS AT THE CHANGE, NOT THE ABSOLUTE VALUE

## QUESTIONS AND ANSWERS

LOTS OF MY BLOODS APPEAR RED...

... WE PUT COMMENTS UNDER AKI ALERTS

WHAT ABOUT USING TRAFFIC LIGHT COLOURS?

THERE IS DIFFICULTY MAKING NEW REFERENCES

CAN YOU HIGHLIGHT USE A DIFFERENT COLOUR TO HIGHLIGHT INSTEAD OF RED ... 10% UK ♂ POPULATION COLOUR BLIND





# LESSONS FROM... ACUTE KIDNEY INJURY

6



DR JON MURRAY  
RENAL CONS - SOUTH TEES

IF WE GENERATE LOTS OF AKI ALERTS WITHOUT SUPPORT...  
= DISENGAGEMENT  
= MISINTERPRETATION

IGNORE IT

DEAL WITH IT..



PHONE MEDICAL SPR OR NEPHROLOGIST?

OR



SECURE EMAIL TO RENAL

ALL CONSULTANTS SIMULTANEOUSLY RECIEVE GP EMAILS

INSTEAD OF "PLEASE CAN YOU SEE THIS PATIENT IN CLINIC"



BESPOKE PROMPT SERVICE



EMAIL FOR ADVICE

WE ARE TRYING TO HELP AVOID HOSPITAL ADMISSION IN CASES WHERE THIS IS NOT NECESSARY

GPs KNOW HOW TO MANAGE UNWELL PATIENTS, AND BENEFIT FROM RENAL INPUT

WE ARE TRYING TO SUPPORT AKI CARE IN THE COMMUNITY DELIVERED BY PRIMARY CARE TEAMS

ON AVERAGE 1-2 EMAILS ARE GENERATED BY GPs IN PRACTICE IN 5 CCGs



## AKI NICE INDICATORS - PILOTING OF INDICATORS

CRAIG GRIME - TECHNICAL ADVISOR

EVERYONE IS AWARE OF NICE GUIDELINES, BUT NOT NICE INDICATORS!

UPCOMING NICE AKI INDICATORS (DEVELOPED WITH 'THINK KIDNEYS')



1. AKI REGISTER (PATIENTS  $\bar{c}$  AKI IN PRECEEDING 12 MONTHS)
2. % MEDICATION REVIEW WITHIN 1 MONTH OF DIAGNOSIS
3. % SERUM CREATININE CHECKS  $\leq$  3 MONTHS OF DIAGNOSIS
4. % PATIENTS GIVEN WRITTEN INFORMATION  $\leq$  4 WEEKS OF DIAGNOSIS

'PILOT' = TESTING TO ENSURE INDICATORS WORK...  
? 'WORTHY MARKERS OF QUALITY... ... OR JUST NOISE!'



# LESSONS FROM... ACUTE KIDNEY INJURY



HOW DO WE MOVE FORWARD?  
SETTING CLEAR AIMS & MEASURING IMPROVEMENT

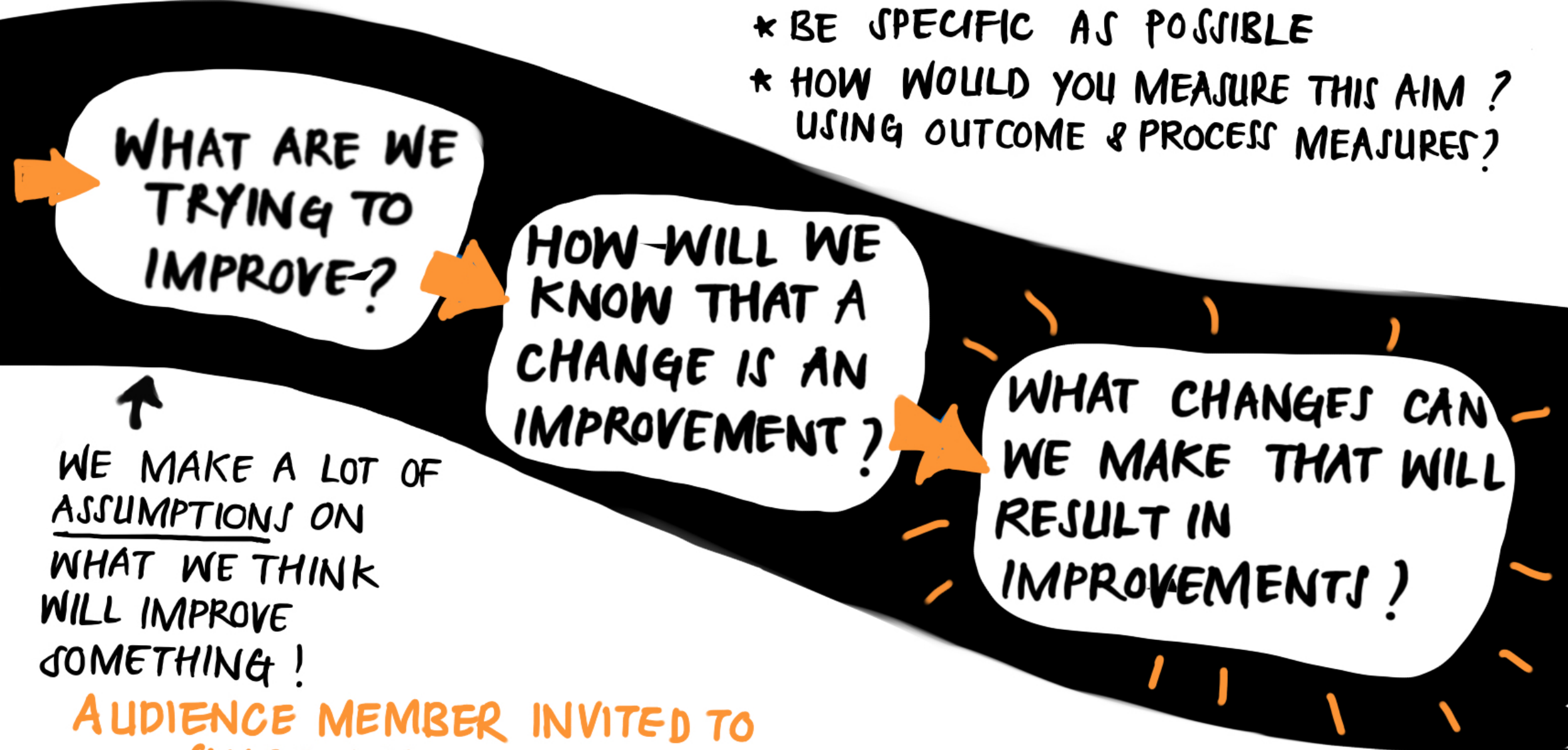
DR JOANNA BIRCHER  
LEAD FOR QUALITY IMPROVEMENT  
TAMESIDE & GLOUCESTER CCG

WE WILL BE MAKING AIMS } WE WANT SPECIFIC MEASURES  
'SOME' IS NOT A NUMBER  
'SOON' IS NOT A TIME



TASK: ON 3 POST IT NOTES  
WRITE AN **AIM**

- \* BE SPECIFIC AS POSSIBLE
- \* HOW WOULD YOU MEASURE THIS AIM? USING OUTCOME & PROCESS MEASURES?



WE MAKE A LOT OF ASSUMPTIONS ON WHAT WE THINK WILL IMPROVE SOMETHING!

AUDIENCE MEMBER INVITED TO SHARE AIM

MY AIM IS TO IMPROVE PATIENT AND CARER UNDERSTANDING OF AKI...

DR BIRCHER

IS EDUCATION AN AIM?

YES, SO WHEN PATIENTS KNOWS WHEN TO SEEK HELP

OK, SO THE AIM IS TO EDUCATE PATIENTS TO ASK FOR HELP WHEN INDICATED \*



THIS IS A DIFFERENT WAY OF THINKING...  
... DIFFERENCE BETWEEN A CHANGE IDEA & AN AIM

