



Healthcare
Improvement
Scotland

Reducing Medicines Harm Across Transitions

Medication Reconciliation WebEx Series 2017

Thursday 16 February 2017
3pm-4pm

Presented by:
NHS Tayside

 #SPSPMeds

 @SPSPMedicines



Welcome



AIM: Support the learning and sharing between boards regarding medication reconciliation as a whole system

What is our theory for improvement?

What tests of change have resulted in improvement?

A few WebEx etiquette points for our meeting today:

If you are not presenting your phone is automatically on mute

Be open to learning and sharing

Use the chat box to participate in the discussion and type in any questions you have

There will be time at the end of the WebEx for Q and A with the presenting board, and we will be monitoring the chat box

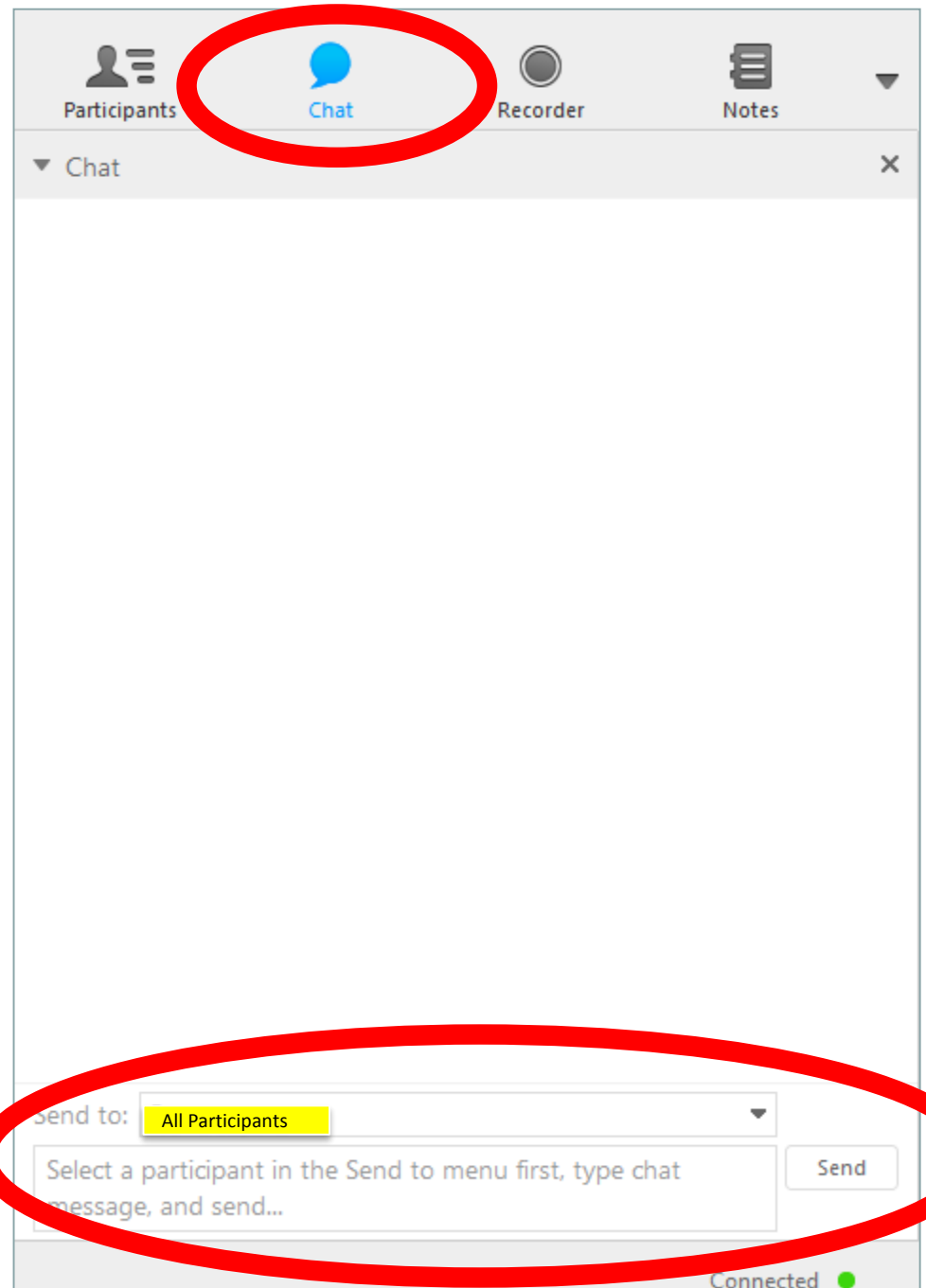


MEDICINES

If you want to get involved in the conversation, please click on the Chat icon circled in red.

Select **All Participants** from the drop down menu, type your message then click send!

This WebEx is being recorded as a resource and will be available on the SPSP website

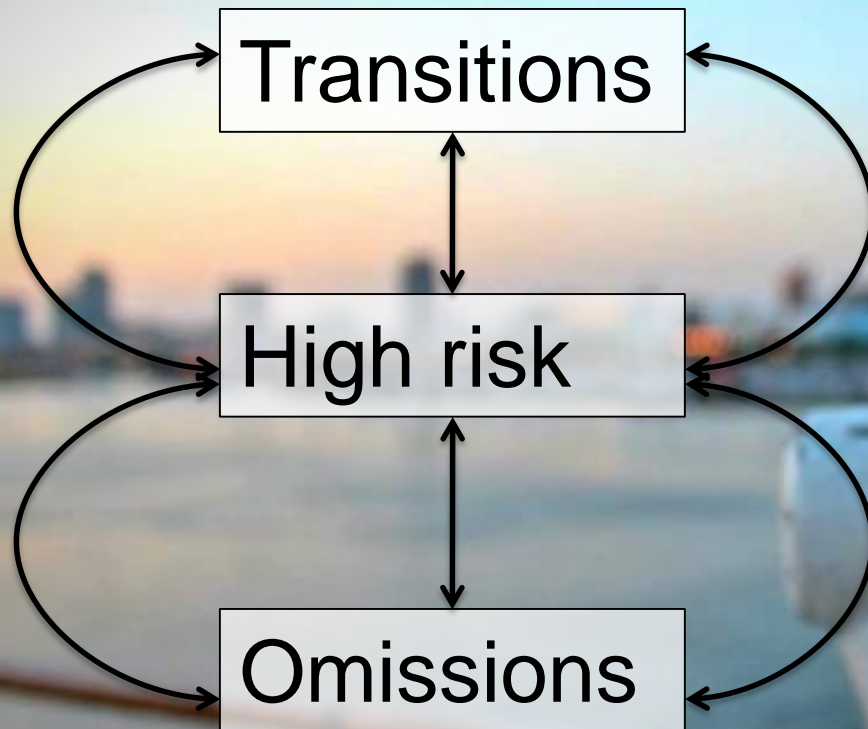




MEDICINES

Medicines aims to bring together improvement activity related to medicines from acute care, primary care, maternity & children's service and mental health.

This is a unique opportunity to consider the safer use of medicines from a whole system approach, focusing on the patient as they move between care settings and home.



Ambition and Aims	Primary Drivers	Secondary Drivers	Change Ideas
<p>Ambition: All patients will have their medicines accurately reconciled on admission to and discharge from hospital, including primary care. This information will be communicated to patients and healthcare professionals.</p> <p>Aims: 95% of patients will have their medicines accurately reconciled within 24 hours of admission (+ accurate Kardex)</p> <p>95% of patients will have their medicines accurately reconciled on discharge (+ accurate IDL)</p> <p>95% of patients will have an accurate GP medication list within 2 working days of IDL being received.</p> <p>Community pharmacy aim (TBC)</p>	Person-Centred Care	<ul style="list-style-type: none"> - Patients are responsible for their own medicines - Patients are actively involved in medication reconciliation processes 	<ul style="list-style-type: none"> - Medication Passport (app and booklet) - Patients represented on medication reconciliation implementation groups - Links with medication self-management programmes - Prompts for patients to take a meds list to all appointments/admissions - Green bags (SAS/ ?Primary Care / ?preop) - 'Tell me how you are taking your medicines' - Ensuring involvement of informal carers in MR discussions, they are often the ones giving medication to the patient. - Reminders to return unused medication stored at home. - Teach back with whoever is giving out the medication to ensure safety and understanding. - Risk assessment process to identify patient/carer understanding and ability re medication management.
	Leadership and Culture	<ul style="list-style-type: none"> - MR is integrated with other key strategic policies - A single system approach supported by senior leadership - MR is a named priority by NHS leaders at all levels - CMO letter (18/2013) 	<ul style="list-style-type: none"> - Policy to support MR across the continuum of care - Establish MR group with oversight of acute and primary care services that reports to senior management - Education of senior leaders regarding impact of MR - Awareness of local data regarding MR processes - Dashboard linking data from acute and primary care - MR leads are named for key health disciplines
	Teamwork, Communication and Collaboration	<ul style="list-style-type: none"> - Roles and responsibilities for MR are understood by the multidisciplinary teams 	<ul style="list-style-type: none"> - Feedback loop established between pre-hospital, primary and secondary care regarding communication of medicines information - A joined up measurement & reporting strategy across acute and primary care interface - Standard method of documenting medicines information - Admission and discharge 'pairs' - Use of 'teach back' with patients regarding medicines information - Pharmacists based in the ED for admitted patients to start medicines reconciliation immediately - Informing community pharmacists of admissions to hospital for patients on blister packs/delivery systems
	Safe, Effective and Reliable Care	<ul style="list-style-type: none"> - Staff understand the importance of MR - Standardised processes / documentation 	<ul style="list-style-type: none"> - MR included as part of structured ward rounds /work flow - MR prompts on white boards - NES LearnPro MR module - Real cases used during staff training to demonstrate the importance of MR
	Systems and IT infrastructure	<ul style="list-style-type: none"> - Explore and optimise eHealth solutions to support MR such as electronic prescribing and administration in hospitals (HEMPA) and primary care electronic solutions. - Standardised documentation/ communication tools 	<ul style="list-style-type: none"> - Linking of ECS and IDL information - Use of eMR form during admission - Incorporation of ECS into inpatient medical records - Automation of communication between acute care and GPs/ community pharmacies (e.g. ECS and IDL) - Linking secondary care and general practitioner prescribing - Rationalisation of locations for documentation of key information (e.g. drug allergy – up to 6 places in health record)

www.scottishpatientsafetyprogramme.scot.nhs.uk/Media/Docs/Medicines/MR-DD.pdf

From previous 3 WebExes:

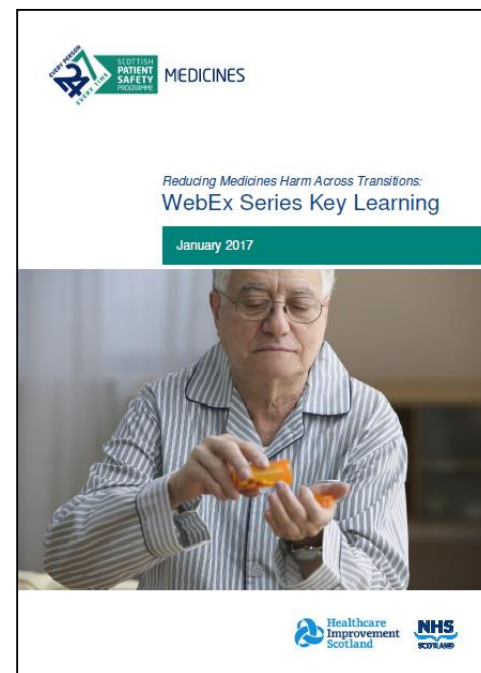
- November 17th (NHS Highland)
- December 15th (NHS Lothian)
- January 19th (NHS D&G)

NHS Dumfries & Galloway (January 2017)

Meds rec on discharge: FY1 and ward pharmacist process with electronic discharge letter

Clinical ward pharmacy team on AMU 7/7 since Dec 2016

electronic Medicine Reconciliation





MEDICINES

SPSP Medicines

NHS Tayside



Maureen Lafferty, Consultant Renal Physician

Debbie Voigt, Diabetes Specialist Nurse

Gordon Thomson, Pharmacy Development Manager

Siobheon Reid, Lead Clinical Pharmacist

Andrew Parker, Scottish Ambulance Service

Shady Botros, Lead Clinical Pharmacist

Feb 2017

Changing the Landscape in Tayside





Changing the landscape in Tayside

- Landscape needs to change as right now we are making it too difficult
- Need to make it more straightforward e.g insulin chart
- The Monitoring and Measurement of Safety Framework
- Moving from assurance to enquiry

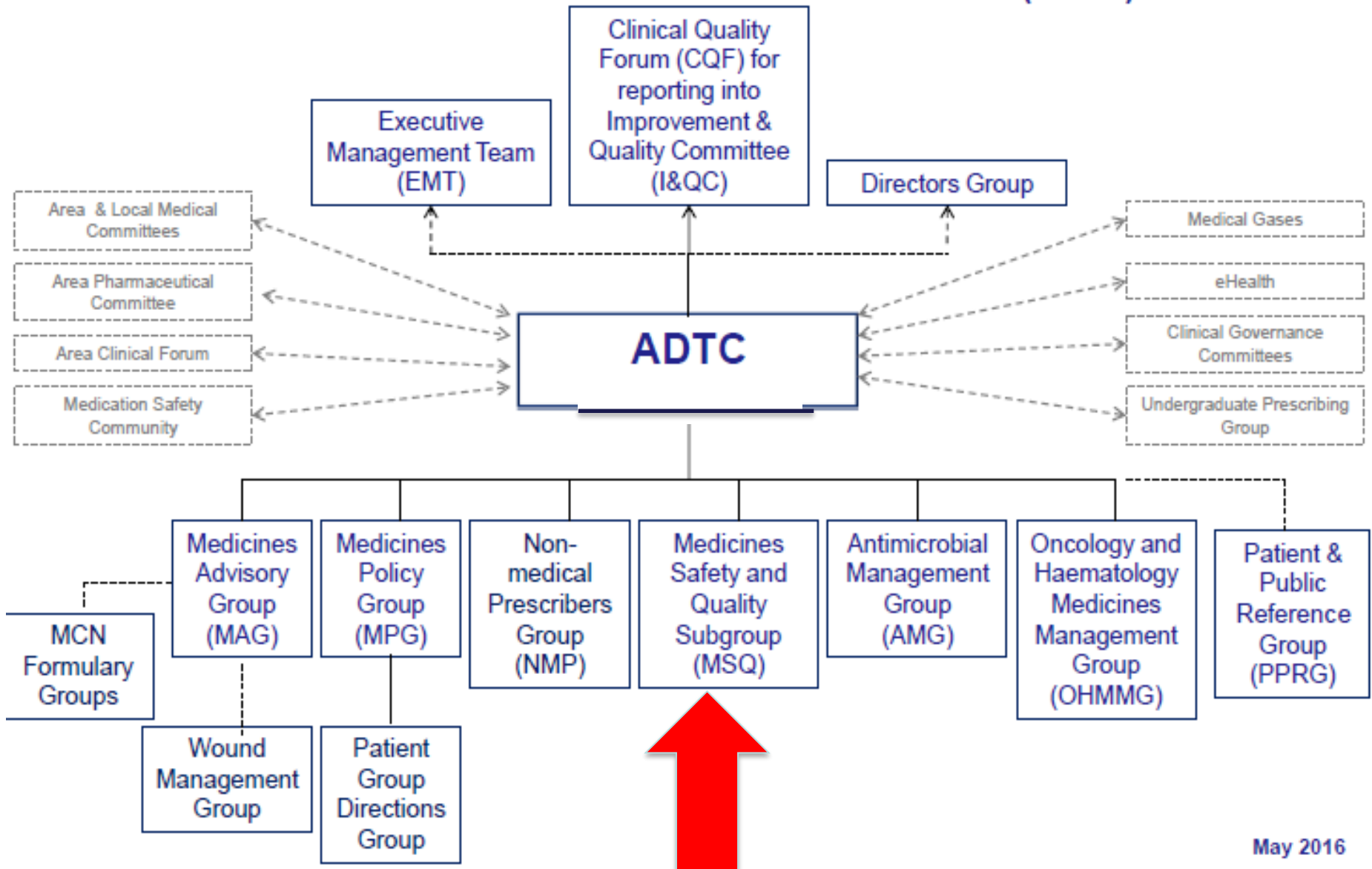


More questions than answers – we don't know the answers yet but...

- Opportunity to reflect and make medicine safety part of existing organisational structures
- 
- Expert group convened – scoping aims and priorities and deciding why/where/who/how?
- 
- Proposals and recommendations to ADTC to get agreement on a way forward

NHS TAYSIDE

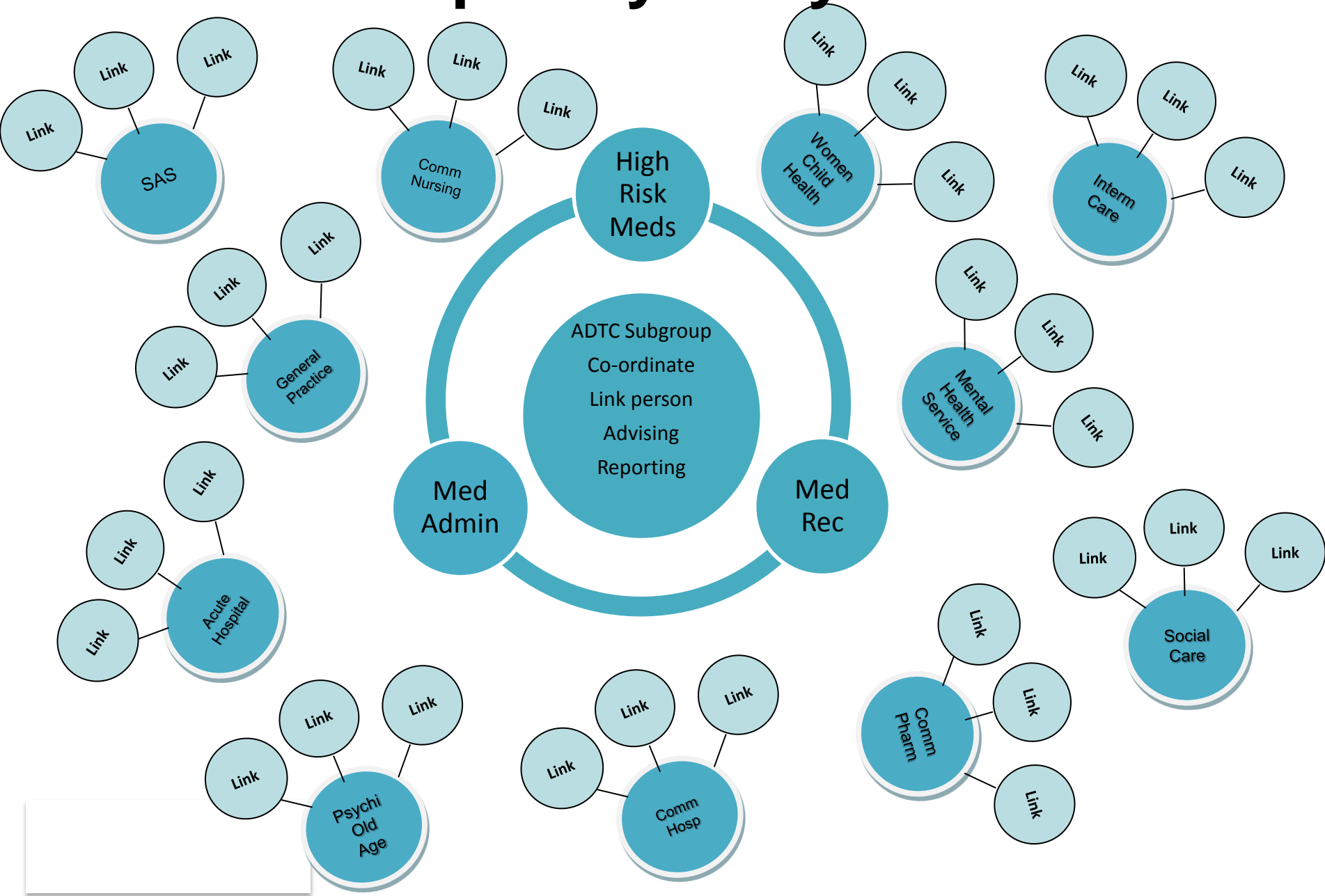
AREA DRUG AND THERAPEUTICS COMMITTEE (ADTC)



What will success look like in Tayside?

- Clarity about priorities for med safety across the organisation
- Consistency of enquiry – regardless of where you are
- Shift from being a programme/collaborative/project to being part of the normal activity

Complexity of Systems





Meet Morag

- 74 years of age
- Type 2 diabetes
- Treated with insulin – Insulatard twice daily
- HbA1c 45 mmol/mol
- eGFR 15 ml/min
- Social: independent, family nearby

- Unwell for 48 hours
- Reviewed at home by NHS 24
- Transferred by ambulance to Acute Medical Admissions Ninewells
- No medication – ECS checked – Insulatard ‘as directed’ and gliclazide 80 mg twice daily
- Patient reported insulin doses prescribed along with gliclazide
- Diagnosed with urosepsis

- Diabetes Specialist Nurse review in ward
- Prescription error identified with aid of SCI diabetes electronic record
- i.e. Insulatard twice daily not four times daily
- Gliclazide had been stopped at diabetes clinic review two weeks prior to admission
- Nurses administering insulin in hospital
- Relative reported that Morag had been increasingly confused of late



Admitted to Hospital by Ambulance

Medicines reconciliation of Patients Own Medicines Brought in by Ambulance

Aim:

By December 2015, 95% of patients brought in by Ambulance from their own home admitted to Ward 4 of Perth Royal Infirmary arrive with their own medications.

Goals:

- Decrease the number of missed medication doses in ward 4 of PRI
- Improve Medicines reconciliation for patients admitted to ward 4 of PRI
- Decrease the number of prescribing errors
- Reduction in waste and additional supply of medicines

PROCESS:

% OF PATIENTS BROUGHT IN BY AMBULANCE (BIBA) WITH MEDICINES
% OF PATIENT'S MEDICINES BROUGHT IN BY AMBULANCE

OUTCOME:

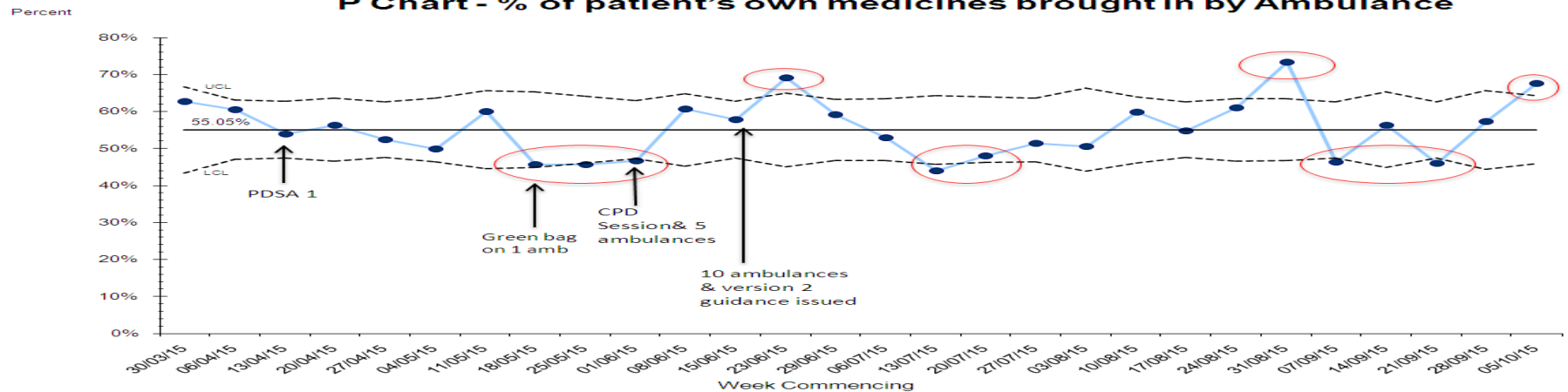
% OF ACCURATE MEDICINES RECONCILIATION PRIOR TO PHARMACY INTERVENTION FOR THOSE PATIENTS BIBA
% OF PATIENTS BIBA WITH NO MISSED DOSES PRIOR TO PHARMACY REVIEW
COST OF ONE STOP DISPENSE SUPPLY AND MEDICINES SUPPLIED ON DISCHARGE FOR WARD 4

BALANCING:

% OF DRUG HISTORIES COMPLETED BY PHARMACY TECHNICIANS DUE TO THE INCREASE OF PODS BROUGHT INTO HOSPITAL
NUMBER OF MEDICINES ORDERED FOR INPATIENT STAY

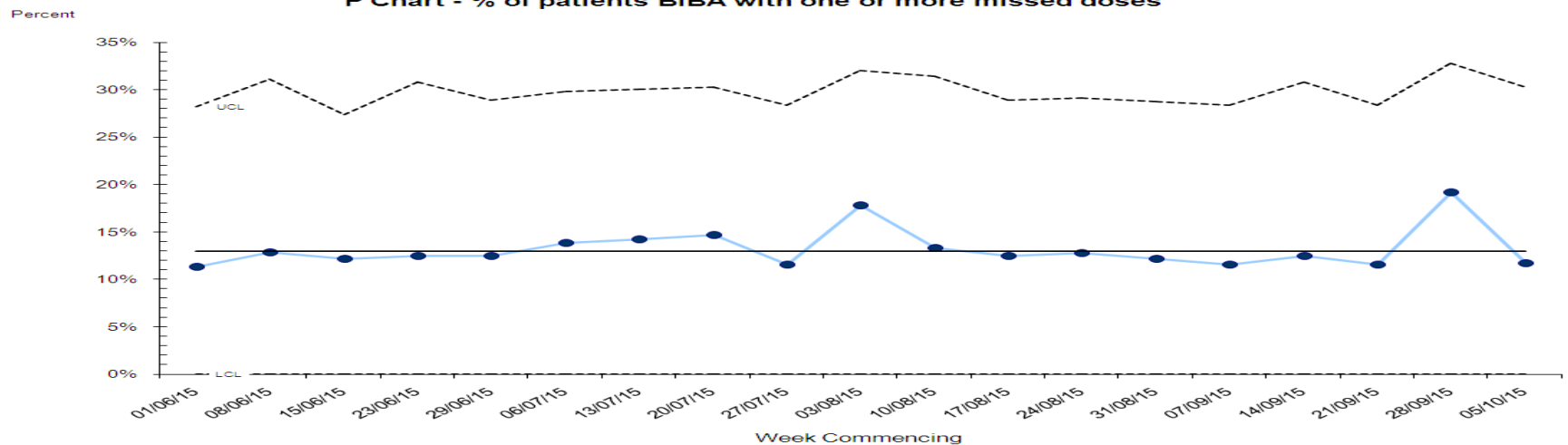
P Chart - % of patients own medicines BIBA

P Chart - % of patient's own medicines brought in by Ambulance



P Chart - % of pts BIBA with one or more missed doses

P Chart - % of patients BIBA with one or more missed doses





MEDICINES

Medication Reconciliation: Story so far....

For us it began in 2005!

Successes

- Reliable systems in acute admissions units
- Process spread to over 85% of in-patients areas but reliability not yet achieved
- Development of single measurement tool based on measures in CMO letter
- Engagement with all SPSP programmes (except Community Pharmacy)
- Involvement of junior doctors and medical students in data collection/improvement
- Collaboration with ADTC
- Mapping of med rec across the system

Challenges

- Engagement with medical staff and lack of understanding of importance
- Need to refresh & re-brand med rec
- Communications at the interfaces
- Variation of process and documentation (mapping by eHealth clinical lead)
- Pharmacy dependant process

Medicines Reconciliation

Please indicate the source of medication history

At least **2 recent** sources of information are required to confirm drug history.

- ☐ GP referral letter (or printed prescribing database from practice)
- ☐ Patient (e.g. verbal/recollection or handwritten note)
- ☐ Drug Chart from other hospital
- ☐ Clinical Portal
- ☐ Nursing home prescription
- ☐ Patient's own medicines (ie boxes/tablets brought along)
- ☐ GP practice (verbal)
- ☐ - ECS (check date of last issue)
- ☐ - EDD (within last month)
- ☐ Relative/Carer
- ☐ Other (please explain)
- ☐ Community pharmacy prescription

Are you satisfied this medication history is complete and accurate? Yes ☐ No ☐

If 'No' please detail what further action is necessary (e.g. contact GP, carer or access ECS)?

Medicine reconciliation completed by? Name: _____ Signature: _____ Bleep: _____

Medicine reconciliation verified by?	Name:	Signature:	Bleep:
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Date & Time of Review

Admission Medication

Action

[illegible]

RECENT ANTIBIOTICS & RECENTLY DISCONTINUED MEDICATION (within 3 months)

NON-PRESCRIPTION MEDICATIONS AND HERBAL MEDICATIONS

--	--	--	--	--	--

No Known
Drug ☐
Allergies

OR

Drug / Substance	Reaction	Drug / Substance	Reaction

02455

DRAFT FOR TESTING

TAYSIDE PRESCRIPTION AND ADMINISTRATION RECORD
(3 WEEK RECORD)

DATE OF ADMISSION _____ RECORD START DATE _____

Hospital/Ward:	Patient Name:
Consultant:	CHI number:
On admission:	Date of Birth:
Weight: Height:	(Attach printed label here)

CONFIRMATION OF PRESCRIPTION REVIEW ON TRANSFER OF MEDICAL CARE

Receiving Unit	Date	Authorized Prescriber (Signature)

MEDICINE ALLERGIES/SENSITIVITIES

IC 916 NSUW00011140 PERE JORDEN WHITE & SHANN | 1

1.	2.	3.	4.
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ALLERGY PRESCRIPTIONS

[illegible]

PATIENT AREA

Are you satisfied that the medicine on this chart is an accurate list of what you should be taking? Y/N

No, please describe

Have you started a new medicine? If yes, make sure you can answer the following:

What is the medicine for? How do I take it and for how long? Can I stop any other medicines?

OTHER MEDICINE CHARTS IN USE

OTHER MEDICINE CHARTS IN USE		
Chart Type	Signed	Signed
1. Insulin		4. Anticoagulant
2. Epidural / Pain relief		5. Mental Health Act
3. Fluid		6. Other

So, in Morag's case how could current improvement work have ensured a robust, reliable med rec process and improved her patient journey?

- Bringing in Morag's medication acts as a useful prompt for discussing medication with her and her carers
- It may have helped elicit a better med rec given Morag's recent confusion.
- The paramedics may have been able to bring in any hand-held insulin dosing record that was present in Morag's house. This may have provided accurate insulin dosing and information on the discontinuation of Gliclazide.

- Although not an issue in Morag's case but recognised as an issue for many patients admitted to hospital is missed doses
- Given the sheer number and variety of medicines available it is not possible for our admitting wards to keep sufficient stock to prevent missed doses
- If more patients bring their medication to hospital this will reduce missed doses on admission
- This is an area of the ambulance service project where our data shows improvement.



ADULT INSULIN PRESCRIPTION AND ADMINISTRATION RECORD (IPAR)



**PATIENT ID
LABEL**

DATE:
Ward:
Hospital:
Chart No.

BARCODE

Prescribing subcutaneous insulin

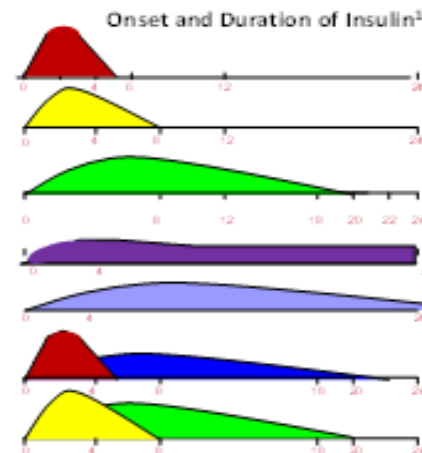
DO NOT USE abbreviations 'U' or 'IU' when prescribing insulin.

If the usual insulin regimen is unknown, do not omit insulin, but use a suitable substitute until insulin details are established use the diagram opposite to guide a suitable alternative preparation e.g.

- Prescribe once daily or twice daily isophane in the elderly
- Use short-acting/intermediate mixture twice daily in others
- Calculate dose as 0.3 units/kg/24hrs for those at risk of hypoglycaemia, 0.5 units/kg/24hrs if insulin resistant

Review monitoring results daily and adjust insulin if required to optimise blood glucose control to avoid hypoglycaemia and hyperglycaemia

Only prescribe intravenous insulin in acutely unwell or fasting patients, or those who are unable to tolerate oral intake



Rapid-acting analogue

e.g. Humalog, Novorapid, Apidra

Short-acting (soluble)

e.g. Humulin S, Actrapid, Insuman Rapid

Long acting analogue

e.g. Lantus or Levemir

Rapid acting analogue-intermediate mixture

e.g. Humalog Mix 25 Humalog Mix 50 or Novomix 30

Short acting-intermediate mixture
e.g. Humulin M3, Insuman Comb 15, 25, 50

Schematic adapted and reproduced with permission from Figure 10.2 in Bailey C.J. Type 2 Diabetes in Practice. The use of insulin. London: Elsevier, 2002.

Implementation of Insulin

Routine Subcutaneous Insulin Prescription Insulin device detail

Start Date	Name of Insulin Preparation [in CAPITALS]	Dose	Time of Administration e.g. before breakfast e.g. at 22.00 hours	Prescribed by	Discontinued by Sign, date and draw a line through prescription
		units			
		units			
		units			
		units			
		units			
		units			

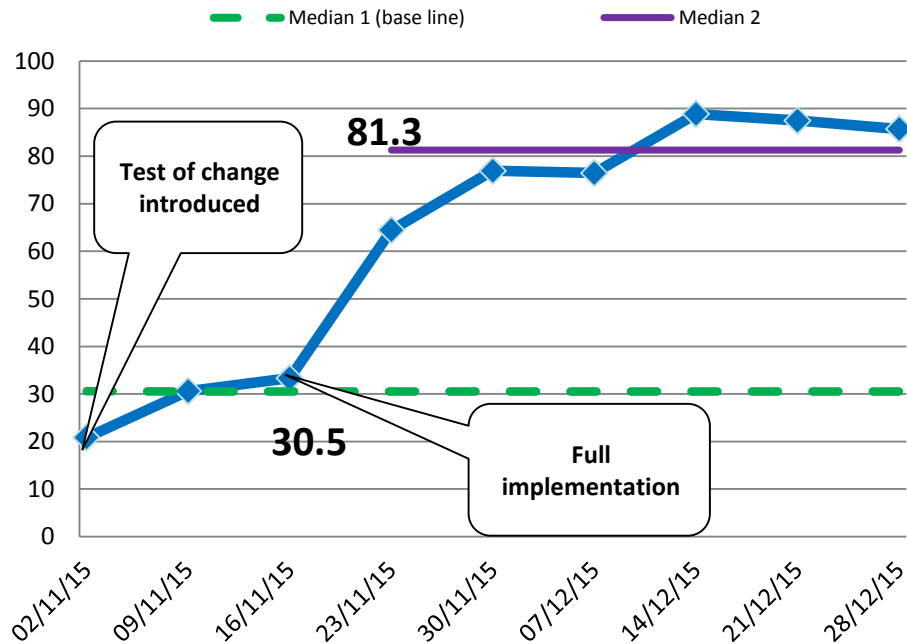
Prescribing & Administration Record

Test-Of-Change

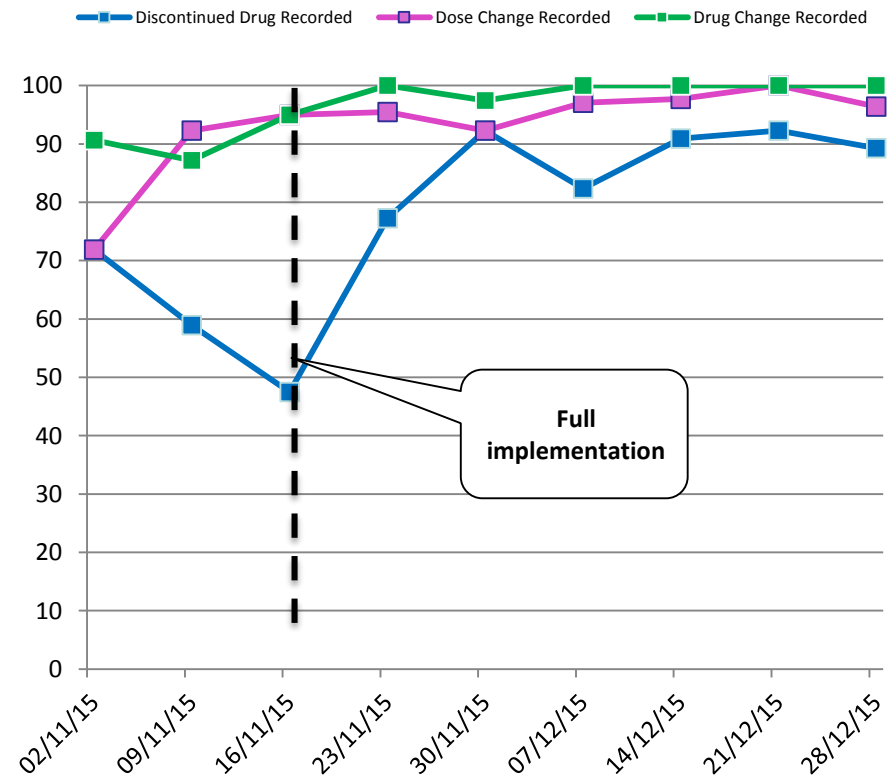
SPREAD

Post Test-of-Change

% Discharge prescriptions with accurate drug list & clear communication to the GP regarding any changes in drug history (prior to pharmacist verification)



Percentage of Discharge Prescriptions with Gaps in Communication Regarding Changes in Drug History (prior to pharmacist verification)



Benefits for EVERYONE

- **Patient** – Accurate discharge prescriptions & less delays hence reducing risk of harm and waste
- **Doctors** – Improve accuracy of discharge prescriptions and better communication with the GPs regarding medication changes
- **Pharmacists** – Less time checking and amending discharge prescriptions and better communication with the community pharmacy teams

Successes

- Goal Achieved & Sustained at > 90%
- Waste, Harm & Variation
- Replicated in Orthopaedics
- Spread across Surgery & Orthopaedics
- Engagement & commitment from Primary Care

Challenges

- Benefits out with Surgical wards?
- Impact on Med Rec in Primary Care?

What does our landscape look like now?



Ninewells Hospital, Dundee
Discharging Ward: 21 (Cardiology)

Dr. NEIL ANDERSON
LAURENCEKIRK MEDICAL GROUP
LAURENCEKIRK HEALTHCARE CENTRE
BLACKIEMUIR AVE
LAURENCEKIRK
AB30 1GX

Date: 13/01/2017
Letter Version: 0.1
Enquiries to:
Telephone:
Email:

Patient Name, CHI, DOB: __/__/__ Address

Electronic Discharge

Read Code	Diagnosis	Date	Laterality	Principal / Other
	Complete heart block			Principal

Date of Admission: 06/01/2017
Mode of Admission: Emergency
Source of Admission: A & E
Admission Reason: Dizziness, collapse
Admission Ward: 21
Admission Speciality: Cardiology
Discharge Type: Discharge from NHS Inpatient/day case care
Date Of Discharge: 13/01/2017
Discharge Destination: Private Residence - lives alone

Read Code	Operations, Procedures, Investigations and Complications	Date	Laterality	Principal / Other
	Pacemaker Insertion- VVIR	10/01/2017		Principal

Allergy Information

Allergy	Date Recorded	Comments
H/O: drug allergy	03/07/2014	Furosemide 20mg tablets
H/O: drug allergy	15/10/2012	Flucloxacillin 250mg capsules
Adverse reaction to naproxen	11/05/2010	Naproxen 250mg tablets
H/O: drug allergy	11/05/2010	Augmentin 375mg tablets (GlaxoSmithKline UK Ltd)

Thank you and questions.....



MEDICINES

Medicines Reconciliation Summit

Thursday 2 March 2017

COSLA Conference Centre
Haymarket, Edinburgh



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Improving and Maintaining Medicines Reconciliation on Admission at North Bristol NHS Trust

Jane Smith
Principal Pharmacist
Governance and Medication Safety Officer
North Bristol NHS Trust Bristol

<https://www.nice.org.uk/sharedlearning/improving-and-maintaining-medicines-reconciliation-on-admission-at-north-bristol-nhs-trust-nbt>

Healthcare Improvement Scotland's Improvement Hub

Medicines Reconciliation Summit

Thursday 2 March 2017

COSLA Conference Centre
Haymarket, Edinburgh

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Registration closes:
23rd February 2017



MEDICINES



Registration closes on the 23rd of February

Please contact your board SPSP Programme Manager

<http://www.scottishpatientsafetyprogramme.scot.nhs.uk/events>



Reducing Medicines Harm Across Transitions
Medication Reconciliation
WebEx Series 2017

Thursday 16 March 2017
3pm-4pm

Summit Teach Back

#SPSPMeds @SPSPMedicines

WebEx Series

WebEx Schedule for 2017

Date	Time	NHS Board Presenting
16 th March 2017	3pm – 4pm	Summit teach back
??	??	??

We would like your help to shape how and what we share in 2017/18



MEDICINES

hcis-medicines.spsp@nhs.net

www.scottishpatientsafetyprogramme.co.uk/programmes/medicines



@SPSP Medicines

THANK YOU

