

Developing Community Paramedicine at a Regional Level with North West Ambulance Services

James Hayward, Senior Project Manager Carol Robertson, Community Paramedic

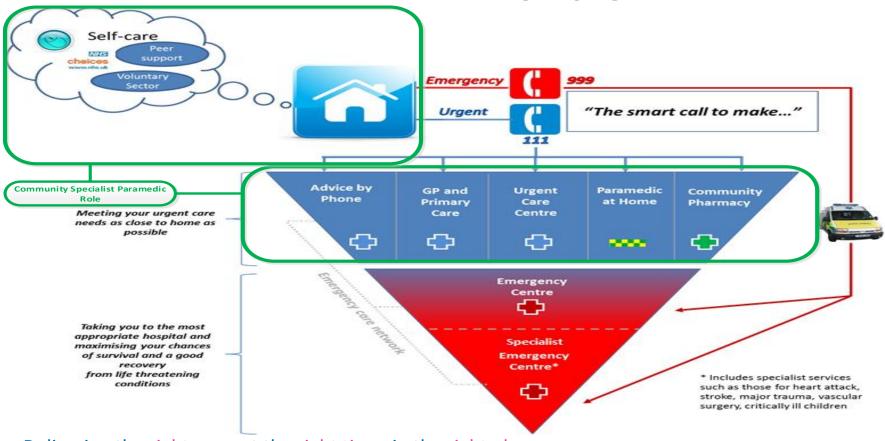
Overview

- Background to Project
- Measuring change and improvement
 - choice of data for planning improvement projects
 - monitoring and evaluating changes in AS delivery
- Evaluation
 - Lessons learned
 - Recommendations for the future development of the role.
- Reality of the new CP role from the practitioner perspective
 - Being a change agent
 - Developing clinical skills

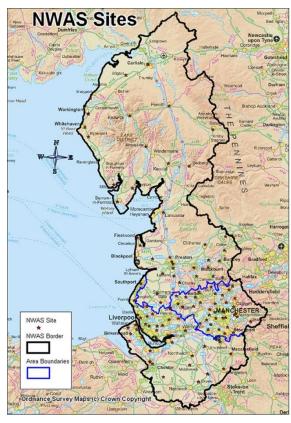
The Plan

- To pilot 12 new Community Specialist Paramedic (CSP) roles in different types of communities across the North West.
- The principle value proposition was to:
 - "improve the health and experience of local populations by working with communities to develop locally-led, innovative solutions that improve the equity, quality and efficiency of emergency and urgent care."

The role



The Plan (NWAS geography)



- To pilot 12 new Community Specialist Paramedic (CSP) roles in different types of communities across the North West.
- The principle value proposition was to:

"improve the health and experience of local populations by working with communities to develop locally-led, innovative solutions that improve the equity, quality and efficiency of emergency and urgent care."

> NW England Over 7 million people 5,400 sq miles (14,000 sq km) 160 miles (260 km long)

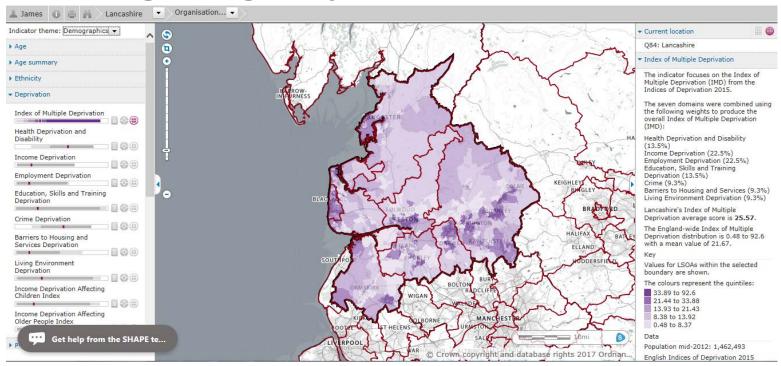
NHSE view of North West

- Vanguard sites
- The NW has 10 vanguard sites piloting new models of care in different areas and health care settings.
- Integrated primary and acute care systems joining up GP, hospital, community and mental health services

Wirral Partners

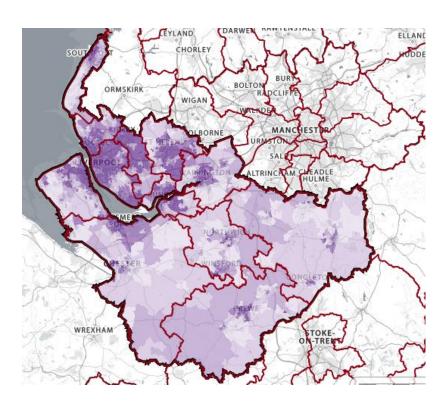
- Salford Together
- Better Care Together (Morecambe Bay Health Community)
- Multispecialty community providers moving specialist care out of hospitals into the community
- Fylde Coast Local Health Economy
- Stockport Together
- West Cheshire Way
- Acute care collaboration vanguard sites
- Salford and Wigan Foundation Chain
- The Neuro Network (The Walton Centre, Liverpool)
- Cheshire and Merseyside Women's and Children Services
- Accountable Clinical Network for Cancer (ACNC)

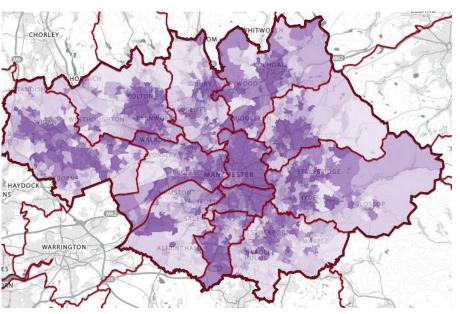
Targeting Deprivation: - Lancashire



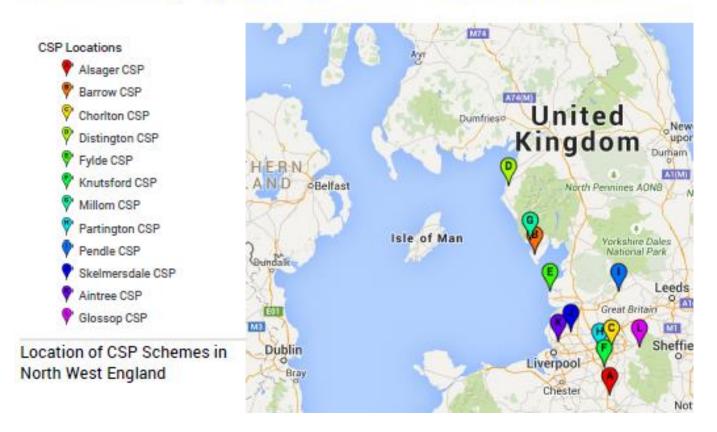
Cheshire & Mersey

Greater Manchester





Community Specialist Paramedic Locations



The ACP Team

Cumbria

Millom, Workington, Barrow

Lancashire

Skelmersdale, Pendle, Fylde

Greater Manchester

Partington, Chorlton, Glossop

Cheshire & Mersey

Alsager, Knutsford, Aintree



Scheme and Project Management

Improvement methodology

- Knowing what one is trying to achieve in the role
- Developing a scheme using business planning approach
- Actively thinking about the factors one uses to achieve objectives

Project Information a vital building evidence base for

- end-to-end evaluation within and across schemes
- view outcome, process and balancing measures
- justifying changes in practice
- providing adequate level of information to justify funding
- developing assurance about Community Paramedic role continuity

Primary Drivers Vision/Goal(s)/Aim(s) (High-level factors you need to influence, to achieve your aims) Systems Working and Local Collaboration Improve the health and experience of patients **Patient & Community Focus** Provide safe care delivered closer to home **Use of Community Assets Technology** Reduce 999 demand and unplanned hospital admissions Clinical Practice Development

Primary Driver Classification

Primary Driver	Meaning in Use
Systems Working & Local Collaboration	Effort to work to change part or whole healthcare system at any or all levels
Patient & Community Focus	Working with HCPs and Patients and Public groups to affect change in population health and healthcare services
Use of Community Assets	Developing best use or new ways of working by utilising people and healthcare assets for wider and more accessible healthcare
Technology	Identifying solutions to healthcare problems using information technology
Clinical Practice Development	Undertaking or providing education or training that helps improve and transform a situation (involves CSP or other Clinicians)

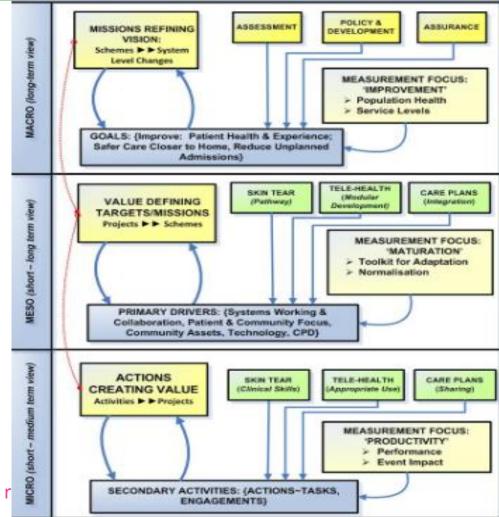
Creating an evidence base

- Scope of practice: interventions pitched at different system levels (Micro, Meso, Macro)
- Time-scale (Short (2015-16); Medium (2017-18); Long (2011-2102)
- How do we measure improvements in:

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"equity, quality & efficiency of emergency & urgent care." over all levels and throughout the project?
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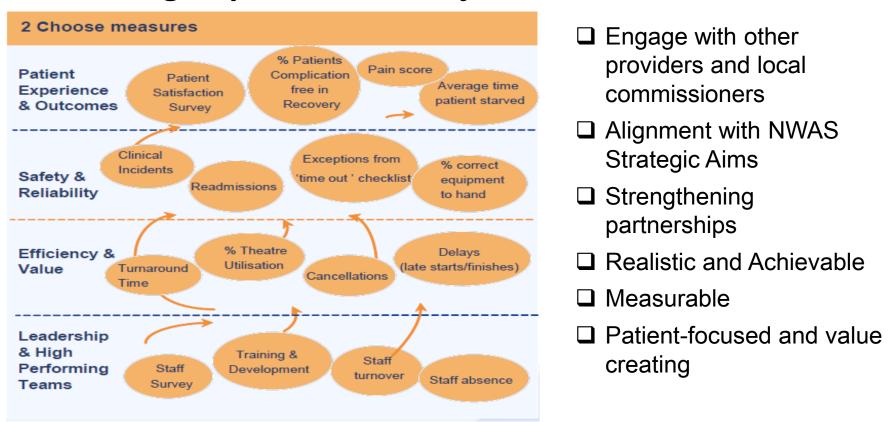
- Measurable improvement (quantitative)
- Demonstrable change (qualitative)

CPM Project ~ Proposed Analytical Framework



Delivering the right care, at the r

Planning Improvement Project – Possible Measures

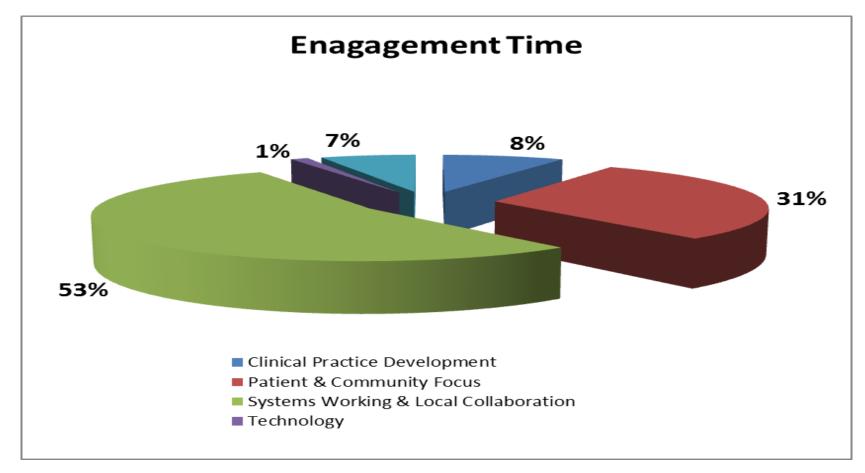


Making Tracks: Project Journal

- Projects/Activities (secondary drivers)
- Engagement Events
- External Work in Primary Care
- Noting how these activities influence (primary drivers) and promote change at scheme level
- Essential (aide memoire) information for evaluation
 - dealing with lessons learned
 - reviewing how project activities become BAU
- Measuring proportion of different kinds of work outside of emergency response

Project Diary - Engagements

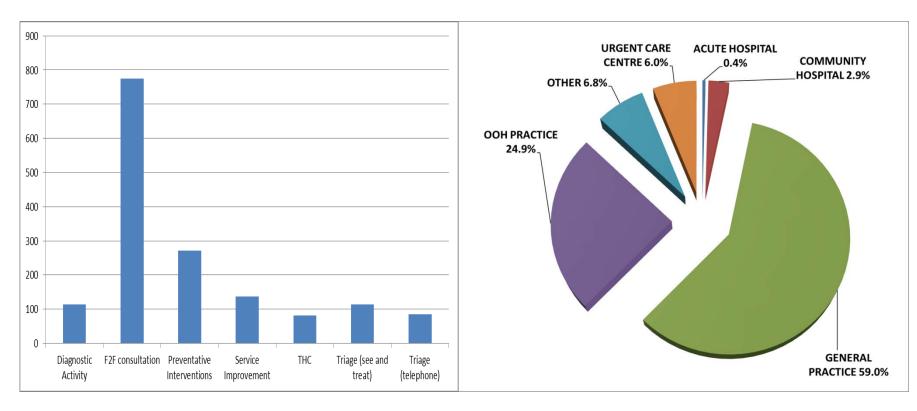
P	ick Scl	neme Site	e 🔽		cord: Glossop CSP: Val Cochrane	Ref	resh Data CSF	Share (hyperlin	nk)	xit Database	
. Sch	neme I	Details 2	2. Projects/ Activities	3. Engagement Event	4. External Work (for host) 5. In	cidents with Respon	se 6. Report / Logs	/ Information			
	Add Record Save Record n.b. Save record 'Refreshes data' after Add record Draft CSP Communications Plan 2014 2015 - (hyperlink)										
E F	ocus		Glossop ale neigbourhood me GOV, HCP CONSULTING Systems Working &	eting	Monthly meeting Update re role, activity Discuss future of role & neighbourho	ood teams	Time on Task Preparation time Status	24/11/2016 2.0 Completed	Follow-up (Consequences and Actions)	Date_entered Entered_by V	28/12/2016 al.cochrane
E F	ocus		Glossop s social care meeting HCP CONSULTING Systems Working &	Memo - Preparation:	Adult social care (DCC) DNs IUCT Discuss roles & responsibilities Frequent callers Complex needs patients		Time on Task Preparation time Status	21/11/2016 1.5 0.5 Completed	Follow-up (Consequences and Actions)	Date_enteredEntered_by _v.	22/11/2016 al.cochrane
E F	ocus	912 Keep we	Glossop Il this winter GOV INFORMING Patient & Communit	Memo - Preparation: v ty Focus	CCG informed me of event with NHS health England promoting Keep Well Tesco Glossop. Joined the team - discussed the cam cons). Spoke to some members of th	I this winter at paign (pros &	Time on Task Preparation time Status	2.0 Completed	Follow-up (Consequences and Actions)	Date_entered Entered_by V	17/11/2016 al.cochrane
E			Glossop ncy Care Network		Monthly meeting. CCG, NWAS, Tame Pennine (MH provider)	eside ICO,	Event Date	04/11/2016	Follow-up	Date_entered	17/11/2016



Project Journal – External Work

==	Scheme proj	ects_activities rpt_project_evaluation								
	Pick Scheme Site	Current Reco	rd: Glossop	Refresh Data CSP Share (hyperlink) Exit Databa						
		CSI	Val Cochrane	CSP Share (hypermix)						
1. S	cheme Details 2	. Projects/ Activities 3. Engagement Events	4. External Work (for h	ost) 5. Incidents with Response 6. Report / Logs / Information						
	n.b. Save record 'Refreshes									
		Add Record Undo Re	cord Save Record	data' after Add record Duplicate Record Patient Stories Folder (hyperlink)						
Г	Reference:	1034 Date worked or (Monday Week)	21/12/2016 Notes:	Home visits:						
	Provider	GENERAL PRACTICE ▼	No. of Cases 2	Manor Hadfield - ?SOBcare home. Struggling to use new inhalers. F2F with GP, inhalers changed						
	Contribution	F2F consultation ▼	Hours worked 2.0	Manor Glossop - Fall review. Spoke with GP - stronger analgesia prescribed, GP chasing up X ray						
	Reference:	1033 Date worked or (Monday Week)	20/12/2016 Notes:	Home visits:						
	Provider	GENERAL PRACTICE	No. of Cases 5	Lambgates - minor wound to lip - assessed, no further action required Simmondley - assessed to ruke out pneumonia. Took patient's wife to GP practice to collect						
	Contribution	F2F consultation	Hours worked 4.0	script						
	Reference:	1028 Date worked or (Monday Week)	20/12/2016 Notes:	BLS/AED update training for clinical staff						
	Provider	GENERAL PRACTICE ▼	No. of Cases 7							
	Contribution	Service Improvement	Hours worked 2.0							
	Reference:	1032 Date worked or (Monday Week)	16/12/2016 Notes:	Home visit:						
	Provider	GENERAL PRACTICE ▼	No. of Cases 1	Howard - assessed, follow up to GP						
	Contribution	F2F consultation	Hours worked 1.0							
	Reference:	1031 Date worked or (Monday Week)	15/12/2016 Notes:	Home visits:						
	Provider	GENERAL PRACTICE	No. of Cases 3	Smithy - exacerbation of COPD. Assessed patient, F2F with GP. Script issued for Abx Howard - swollen legs - chronic problme, assessed, reassured. Arranged follow up with GP						
	Contribution	F2F consultation •	Hours worked 2.5	Howard - ?chest infection. Assessed, Abx required. NO GP - practice spoke with G2D to arrange						
R	ecord: 4	6 → N → N No Filter Search								

Hours Worked for External Hosts and patients



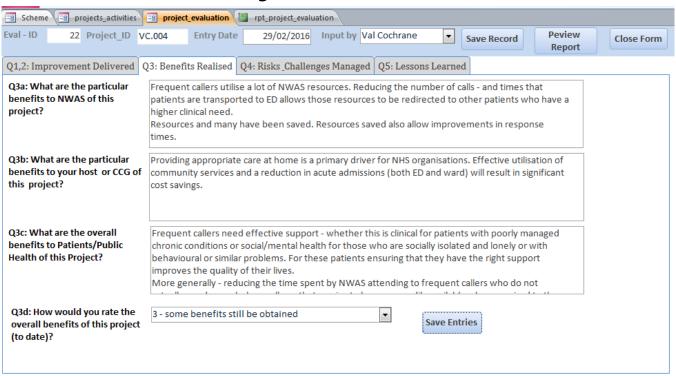
Project Journal – Project Actions

VC.012	Project Bariatric Patient I es Measurement Progress	D and Care Planning Evaluation ACTIONS T.	ASKS (Diary)	Edit Project Name	Save Reco		Add New Project to Selected Scheme	Close Form
ActionID	Actions - Tasks	People Involved Reso	ources	Add New Re	cord		.b. Save record 'Refreshes dat the form' after Add record	Close Fe
Entry Date 09/09/2016 Task Order	Spoke with patient and arranged bariatric plan interview	Patient		Project Stage Due Date (Timescale)	Active	Type of Action: Primary Driver	Patient & Community Focus	•
lask Order		Time taken:	0.3	Action_Status	Delivered	Follow-u	p:	•
Entry Date 25/08/2016 Task Order	Letters sent out to 25 patients from Lambgates with BMI >45 offering engagement and CCP + mini health check	Admin staff at Lambgates		Project Stage Due Date (Timescale)	Active	Type o Action Primar Driver	Patient & Community Focus	•
	CONTRACTOR CONTRACTOR AND CONTRACTOR	Time taken:		Action_Status	Delivered	▼ Follow-u	D:	_
Entry Date 31/05/2016 Task Order	Discussio with GP re bariatric CCPs. Sent draft of letter to patients. GP iddentified number of candidates.	Dr Palmer, Lambgates		Project Stage Due Date (Timescale)	Pending	Type o Action Primar Driver	Patient & Community Focus	AGENCIES 🔻
lask Order	Ordered bariatric BP cuff.	Time taken:	0.8	Action_Status	Delivered	Follow-u	p:	•
Entry Date 24/05/2016 Task Order	Spoke with Julie Butterworth re letter to patients from Lambgates. Discussed with Barbara Coleman - sent draft	Julie Butterworth Barbara Coleman		Project Stage Due Date (Timescale)	Pending	Type o Action Primar Driver	Patient & Community Focus	•
	of letter.	Time taken:	0.7	Action_Status	Delivered	Follow-u	p:	•

Projects by Main Primary Driver

Primary Driver	Project Activity	% all Projects	% Total Time
Systems Working & Collaboration	SERVICE DEVELOPMENT PATHWAY SCHEME MANAGEMENT NETWORKING	40%	39%
Community & Patient Focus	FREQUENT CALLERS COMMUNITY CARE PLANS SCHOOLS EDUCATION CARE-NURSING HOMES COMMUNITY REFERRALS FALLS RED RESPONSE PUBLIC EDUCATION	32%	35%
Use of Community Assets	RESUS - AED PLACEMENT CFR - BLS/FIRST AID TRAINING	11%	10%
Technology	TELEHEALTH	9%	5%
Clinical Skills Development	CLINICAL SKILLS NURSING HOME TRIAGE	8%	11%
ing the right care at the	TOTALS	100% n = 130	100% 3,903 hrs

Project Evaluation



Development of improvement measures



R1 & R2 Performance



Non-conveyance rates



HCP Admission activity (by practice[s]) (activity levels and distribution)



Care/Nursing Home activity (by home[s] covered by scheme)



Care Plans in place (as proportion of 2%)



Unplanned Admission rates (by practice[s] covered by scheme)



Re-admission rates (by practice[s] covered by scheme)

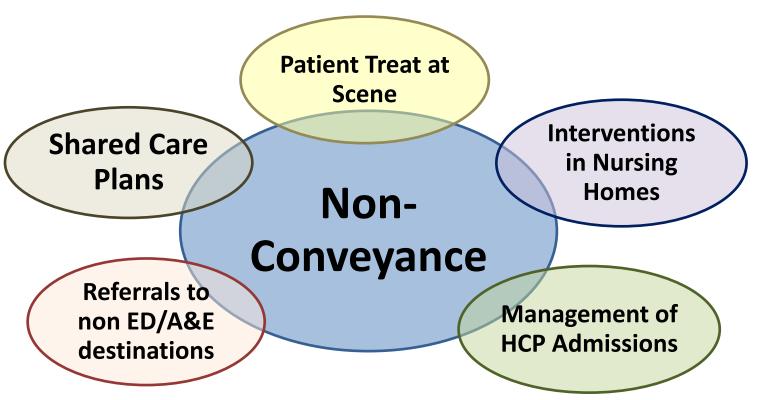


AVS utilisation (prototyped in Skelmersdale)



Experience Measures

Outcome-based Measures



Annual Comparison of Non Conveyance to A&E

			_							-			
Non-Conveyance t	o A&E (Def	lection)											
,	NWAS AII	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelmersdale	Barrow	Millom	Workington
2014/15	26.71%	26.84%	25.11%	28.45%	25.48%	19.92%	28.78%	27.57%	32.00%	26.62%	32.66%	30.91%	22.78%
April 14/15	25.96%	35.22%	25.00%	25.26%	20.98%	19.42%	31.93%	26.44%	34.77%	22.72%	28.98%	23.64%	24.62%
May 14/15	26.85%	23.67%	26.32%	24.76%	29.78%	16.12%	26.58%	29.08%	33.33%	28.18%	34.81%	25.88%	23.08%
June 14/15	27.06%	26.03%	22.47%	26.70%	18.46%	20.08%	34.57%	27.57%	29.05%	24.80%	32.49%	29.58%	22.78%
July 14/15	27.42%	26.27%	20.56%	30.05%	27.32%	25.30%	27.42%	30.57%	33.77%	27.90%	31.86%	41.89%	20.29%
August 14/15	26.91%	24.95%	21.52%	25.41%	21.24%	23.41%	28.94%	23.23%	33.82%	25.26%	28.55%	29.35%	22.83%
September 14/15	26.46%	25.43%	23.76%	28.65%	29.63%	22.82%	26.55%	23.55%	32.15%	23.99%	33.54%	22.08%	23.65%
October 14/15	26.95%	29.39%	26.51%	28.92%	26.83%	16.11%	30.00%	26.37%	31.65%	25.00%	31.28%	34.83%	22.56%
November 14/15	26.51%	22.20%	31.08%	31.25%	26.24%	18.70%	27.37%	26.88%	33.33%	25.47%	30.93%	39.56%	24.79%
December 14/15	27.23%	27.16%	23.42%	31.02%	26.25%	16.54%	26.85%	30.28%	28.41%	30.72%	36.88%	39.51%	24.70%
January 14/15	26.85%	25.59%	29.70%	30.19%	23.00%	19.68%	27.78%	26.48%	30.46%	30.06%	37.62%	27.54%	21.60%
February 14/15	26.46%	28.38%	25.00%	28.07%	28.65%	19.51%	29.44%	30.10%	33.04%	30.57%	32.87%	24.32%	18.16%
March 14/15	25.73%	26.94%	27.03%	30.58%	27.49%	20.69%	28.77%	29.88%	30.26%	24.75%	31.32%	28.57%	23.86%
2015/16	30.90%	31.15%	31.12%	37.77%	31.08%	27.68%	29.47%	32.00%	36.54%	32.29%	37.40%	36.27%	29.38%
April 15/16	28.20%	47.92%	34.83%	33.49%	22.71%	22.10%	28.05%	30.34%	33.57%	32.09%	31.82%	28.41%	23.01%
May 15/16	30.51%	27.40%	34.18%	32.65%	29.52%	26.75%	28.41%	35.23%	35.48%	34.26%	34.50%	22.67%	26.92%
June 15/16	31.51%	35.40%	40.91%	53.93%	26.09%	23.66%	32.64%	30.51%	37.83%	30.72%	34.81%	35.80%	29.92%
July 15/16	31.33%	31.58%	30.39%	35.27%	37.80%	26.40%		33.52%	38.62%	32.57%	39.78%	30.43%	32.57%
August 15/16	31.46%	30.04%	30.83%	35.38%	31.60%	24.27%	29.01%	35.00%	41.87%	34.00%	39.92%	38.20%	33.60%
September 15/16	30.89%	29.46%	25.84%	40.51%	29.39%	32.49%		29.47%	37.72%		40.92%	35.87%	27.36%
October 15/16	30.85%	27.88%	33.64%	33.65%	27.92%	28.32%		29.41%	37.24%		37.83%	43.53%	28.94%
November 15/16	30.47%	27.43%	34.23%	39.51%	33.62%	29.55%		33.09%	35.47%		38.05%	37.00%	29.34%
December 15/16	31.49%		26.05%	34.60%		33.79%		33.69%	36.34%		38.23%	38.10%	27.97%
January 15/16	30.88%	30.78%	26.79%	32.52%	29.52%	28.92%		30.73%	34.95%		37.88%	42.86%	28.96%
February 15/16	31.28%	28.10%	27.87%	38.73%	30.98%	25.84%		33.03%	32.20%		37.42%	33.33%	32.76%
March 15/16	31.64%	26.13%	31.31%	37.55%	33.93%	28.68%	28.30%	30.38%	36.92%	34.14%	39.92%	44.14%	30.19%
	NWAS All	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelmersdale	Barrow	Millom	Workington
Improvement	4.19%	4.31%	6.01%	9.32%	5.60%	7.76%	0.68%	4.43%	4.54%	5.67%	4.74%	5.36%	6.60%
Diff from NWAS avge. (2014/15)		0.13%	-1.60%	1.74%	-1.23%	-6.79%	2.08%	0.86%	5.29%	-0.09%	5.95%	4.20%	-3.93%
Diff from NWAS avge. (2015/16)		0.26%	0.23%	6.88%	0.19%	-3.22%	-1.43%	1.11%	5.64%	1.39%	6.51%	5.38%	-1.52%
Relative Improvement		0.13%	1.83%	5.14%	1.42%	3.58%	-3.50%	0.24%	0.35%	1.49%	0.55%	1.18%	2.41%

Patient Treat at scene

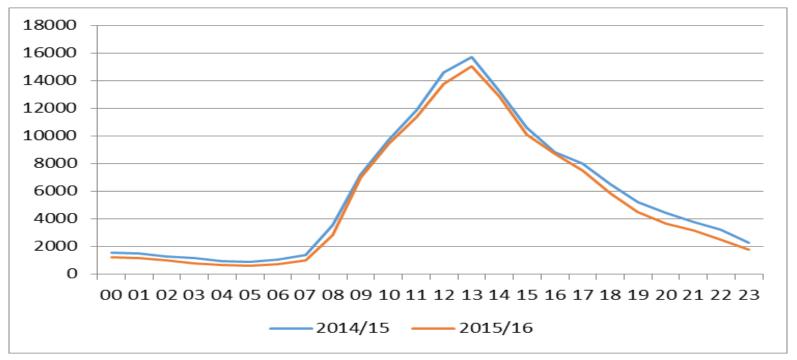
Patient Treat at Scene	NWAS (AII)	CSPs (all)	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelmersdale	Barrow	Millom	Workington
2014/15	178,091	13,723	1,145	253	600	796	508	1,210	1,239	1,904	2,193	2,521	255	1,099
2015/16 (to date)	199,665	16,217	1,422	318	796	958	646	1,329	1,576	2,216	2317	2,952	321	1,366
Monthly Difference on Pr	evious Year													
2015/16	NWAS (AII)	CSPs (all)	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelmersdale	Barrow	Millom	Workington
April 15/16	372	178	96	8	20	10	8	-12	10	0	40	12	9	-23
May 15/16	838	90	17	1	11	-5	14	9	20	-19	50	-18	-6	16
June 15/16	2,051	356	46	16	86	26	-7	14	22	65	51	11	4	22
July 15/16	1,275	191	19	7	18	33	-6	3	27	6	2	53	-4	33
August 15/16	2,515	381	21	13	23	31	-8	36	69	55	45	78	0	18
September 15/16	1,690	172	15	-4	18	6	8	3	31	25	43	14	18	-5
October 15/16	1,820	186	7	10	-1	6	26	5	35	26	25	3	7	37
November 15/16	1,311	208	20	8	9	16	22	2	36	16	12	73	-4	-2
December 15/16	1,290	192	10	2	-7	-2	37	25	14	69	-24	38	6	24
January 15/16	2,276	119	-4	0	-15	8	6	14	25	15	-14	35	13	36
February 15/16	2,815	290	32	10	17	21	19	23	36	24	-4	44	5	63
March 15/16	3,321	291	-2	-6	17	12	19	-3	12	30	58	88	18	48
	Total (NWAS)	CSPs (all)	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelmersdale	Barrow	Millom	Workington
Increases (sum of differences)	21,574	2,654	277	65	196	162	138	119	337	312	284	431	66	267
% increase on 2014/15	12%	19%	24%	26%	33%	20%	27%	10%	27%	16%	13%	17%	26%	24%
Relative Improvement		7%	12%	14%	21%	8%	15%	-2%	15%	4%	1%	5%	14%	12%

HCP Admissions

HCP Calls	NWAS	Aintree	Alsager	Knutsford	Chorlton	Glossop	Partington	Fylde	Pendle	Skelm	Barrow	Millom	Workington
2014/15	210,597	2,821	211	569	527	662	2,268	1,492	1,639	2,735	2,829	464	2,483
2015/16	204,327	3,080	244	448	521	602	2,155	1,458	1,667	2,590	2,859	363	2,079
Difference	-6270	259	33	-121	-6	-60	-113	-34	28	-145	30	-101	-404
% Diff.	-3%	9%	16%	-21%	-1%	-9%	-5%	-2%	2%	-5%	1%	-22%	-16%
Difference fron	n NWAS	12%	19%	-18%	2%	-6%	-2%	1%	5%	-2%	4%	-19%	-13%
Interpre	etation:	big population: initial engagement with the one GP practice	persistent issues with remoteness: lack of referral points within area?	increased work with GP in Q3/Q4	CSP wholly based with GP: big population	CSP triaging calls from several GPs before they log HCP calls	effort from	early quick wins with GP appear not to be sustained	I ISCKUT	big area: variability due to spread of effort	big area: gains only made in 3rd quarter when working with Integrated Care Centre	established mature	big area: Q3 increase in collaborative effects

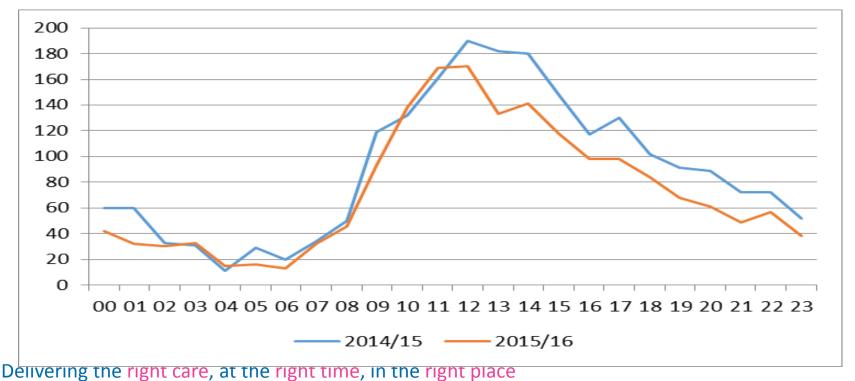
HCP Card35 Calls - Spikes 2014-15 and 2015-16

NWAS as a whole:



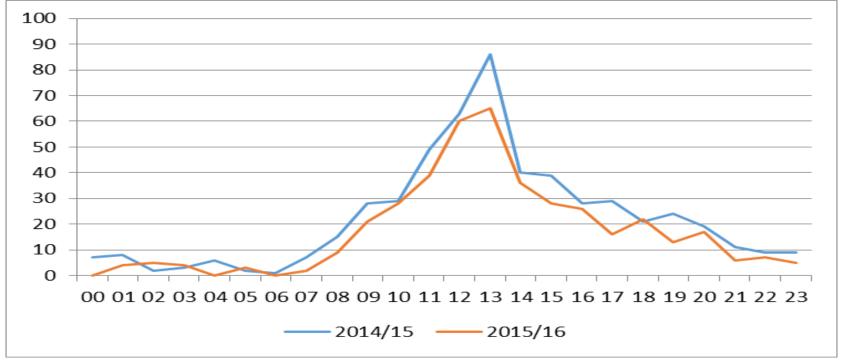
HCP Card35 Calls - Spikes 2014-15 and 2015-16

Workington: flattening head and tail



HCP Card35 Calls - Spikes 2014-15 and 2015-16

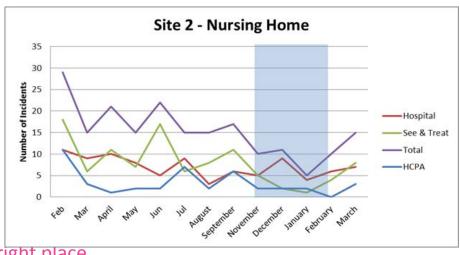
Knutsford flattening head and tail



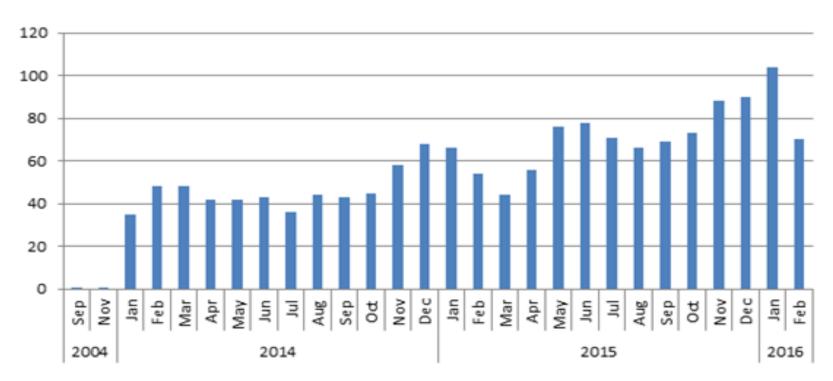
Effects of elderly triage on incidents in care and nursing homes (Skelmersdale - West Lancashire)

Site 1 Data - Care Home

30
25
20
15
5
0
Hospital
See & Treat
— Total
— HCPA



Alternatives to Transport Increase in Referrals to local AVS (Skelmersdale)



Alternative to Transport AVS Management - Cost Savings for CCGs

Incidents with conveyance avoided by AVS utilisation	263		
CCG Savings within CCG	Incident Costs	Based on 10 months	Based on 12 months
	CUSIS	TOHIOHUB	IIIOIIII
See and Convey	£185	£48,655	£58,386
See and Treat	£115	£30,245	£36,294
Total Amb Savings		£18,410	£22,092
Hospital A&E Attendance only	£143	£37,525	£45,030
Savings		£55,935	£67,122

Qualitative analysis of Feedback

- "I must admit he really has <u>broken down walls</u> here. We were focussed and wanted to make things work. " + "He's played a major part in transformation really. " (Skelmersdale)
- "People didn't know what the problems were before she came. Things that we didn't realise could be better suddenly got better."
- "Having a CSP to call on patients at short notice to see them there and then is much more <u>responsive</u> and is a <u>timesaving</u> for the patient, for the ambulance and hospital .. marvellous <u>all round</u>." (Glossop)
- "I want to see the 70+ who are stoical and don't come to the surgery; they can wait too long. There are people who are anxious about consulting and people who don't know whether they're ill or not." (Millom)

January 2017 Current concerns...

- Continuity...
 - Embedding role within Urgent Care Services
 - Stakeholders & Funding
 - Focussing limited resource locally
- Developing specific projects / application of role
 - Nursing Homes
 - Clinical Assessment Services
- Evaluating information for planning system change
 - How to make changes sustainable
 - How can joint funding work better





North West Ambulance Service

livering the right care, at the right time, in the right place

Carol Robertson

@NWAmb_Knutsford

Community Paramedic Knutsford











HCP admissions reduced by 21% (2014 vs 2015)



AEDs & Community First Responders 6 12 12 12





Education and engagement





Care plans, care homes, frequent callers and chronic conditions

















The future













elivering the right care, at the right time, in the right place.

Thank you for your attention

Any questions?









Questions arising ...

Translation

- Accounting for improvements over time
 - (how to judge length of time needed to procure new service or improvements)
 - What different roles/resources can be configured in the urgent care sector
- How new / innovative ways of working can be transferred to other (geographical /community) healthcare settings

Sustainability

- Accounting for improvements at a Meso and Macro Level
- How do health improvements become sustainable (after CPs/ACPs are no longer running schemes)?
- Forms of organisation for community paramedicine in England