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EVALUATION OF PHARMACY TEAMS IN GP PRACTICES , 2018

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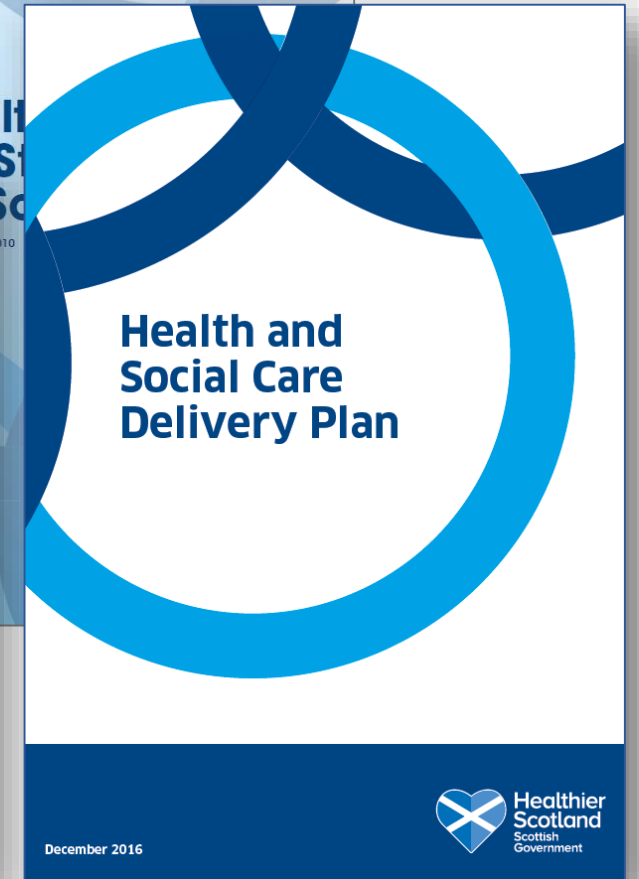
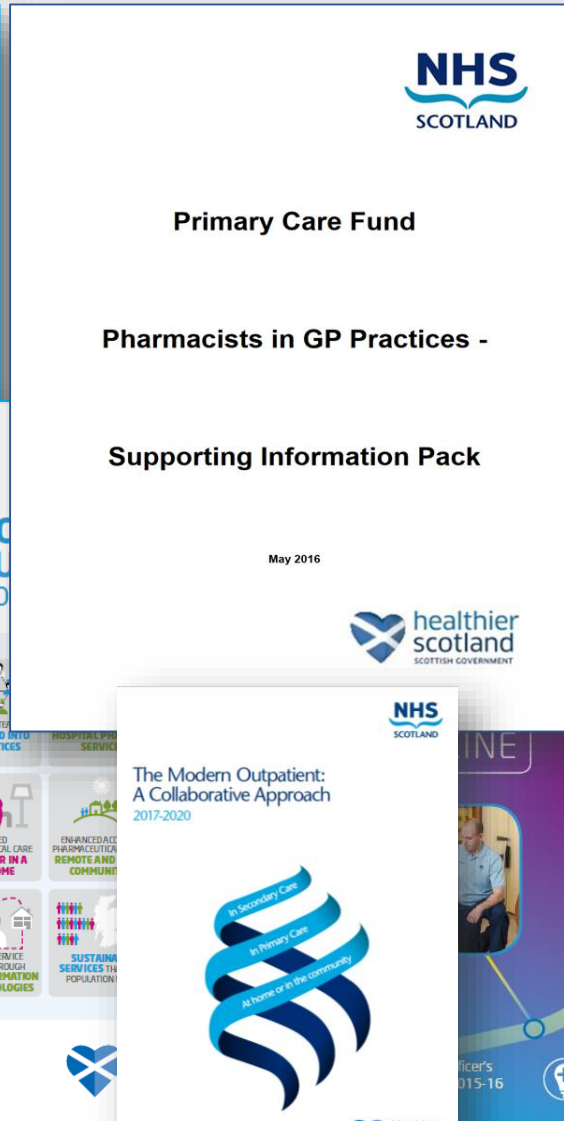
Dr Rosemary Newham

Dr Rachel Bruce

Mr James Mackerrow

Miss Sarah Fry

Policy Background



Policy Background

A Route Map to the
2020 Vision for
Health and Social Care



Primary Care Fund

Pharmacists in GP Practices -



The Health

Health and
Social Care
Delivery Plan

2015 - Primary Care Fund gave £16.2m to recruit up to 140
FTE pharmacists to work within GP Practices

2017/18 – Further £4.2m

Prescription for

A Vision and Action
pharmaceutical care
partnerships and in

September 2013
Scottish Government



Scottish Government
Pharmacy and Medicines Division
Directorate for Chief Medical Officer



2015-16



December 2016



Deliverables

Deliverable 1 – Workforce
Development

Deliverable 2 – Service Activity

Deliverable 3 – Service and
Patient Outcomes

Deliverables

Deliverable 1 – Pharmacy Team Workforce Development

- Qualifications and service duration
- Knowledge and skills
- Training undertaken
- Employment and contractual models deployed
- Skills mix (include staff banding)

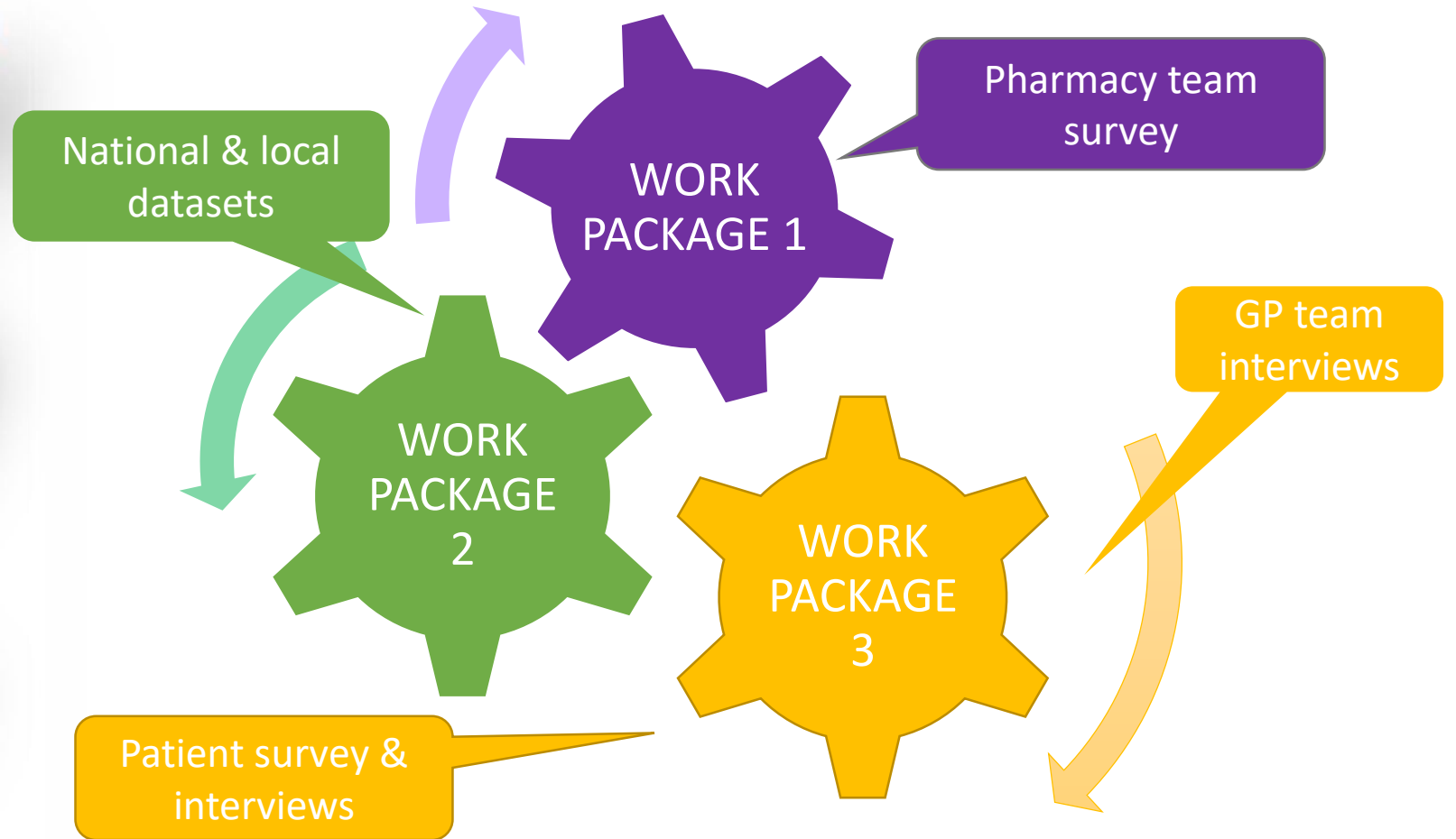
Deliverable 2 – Service Activity of GP Pharmacy Teams

- Population coverage and workforce (pharmacy and non-pharmacy) of GPs with Pharmacy Teams
- Activities undertaken by the pharmacy team
- Time profile the developing activity within the GP Practice (both role development over time and also time spent on different activities, dependent on quantitative data availability)

Deliverable 3 – Service and Patient Outcomes (GP Pharmacy Team)

- Change in GP Practice / NHS Board patient clinical outcomes resulting from focused pharmacy team activity
- Capacity of GP time released
- Experience and views and of the wider GP team on the pharmacy team service offered
- Experience and views of patients on the pharmacy team service offered
- Unintended consequences of the pharmacy team on GP services

Data Collection



Work package 1 – Pharmacy Team Survey

Development

- Included demographics, training, activities, confidence/competence and Normalization Process Theory
- Piloted

Dissemination

- Emailed link to online survey sent via NHS Healthboard contacts
- Two reminder emails sent

Analysis

- 393 (83%) pharmacists and 101 (92%) pharmacy technicians responded
- Descriptive and inferential statistics of quantitative data
- Content analysis of open text responses

Work package 2 – National & local datasets

Scoping

- Areas of interest informed by: pharmacy team survey, Inverclyde data and pharmacotherapy service detailed in GP contract

Areas

- Polypharmacy clinics
- Acute medication requests

Analysis

- Routinely collected data from two NHS Healthboards interrogated for relevant intelligence
- Polypharmacy guidance estimates used to enhance findings

Work package 3 – Case Studies of Pharmacists in GP Practice

Selection

- 7 sites identified
- Reflected: urban/remote and rural; small/large list size; deepend; high proportion of care home patients

Method

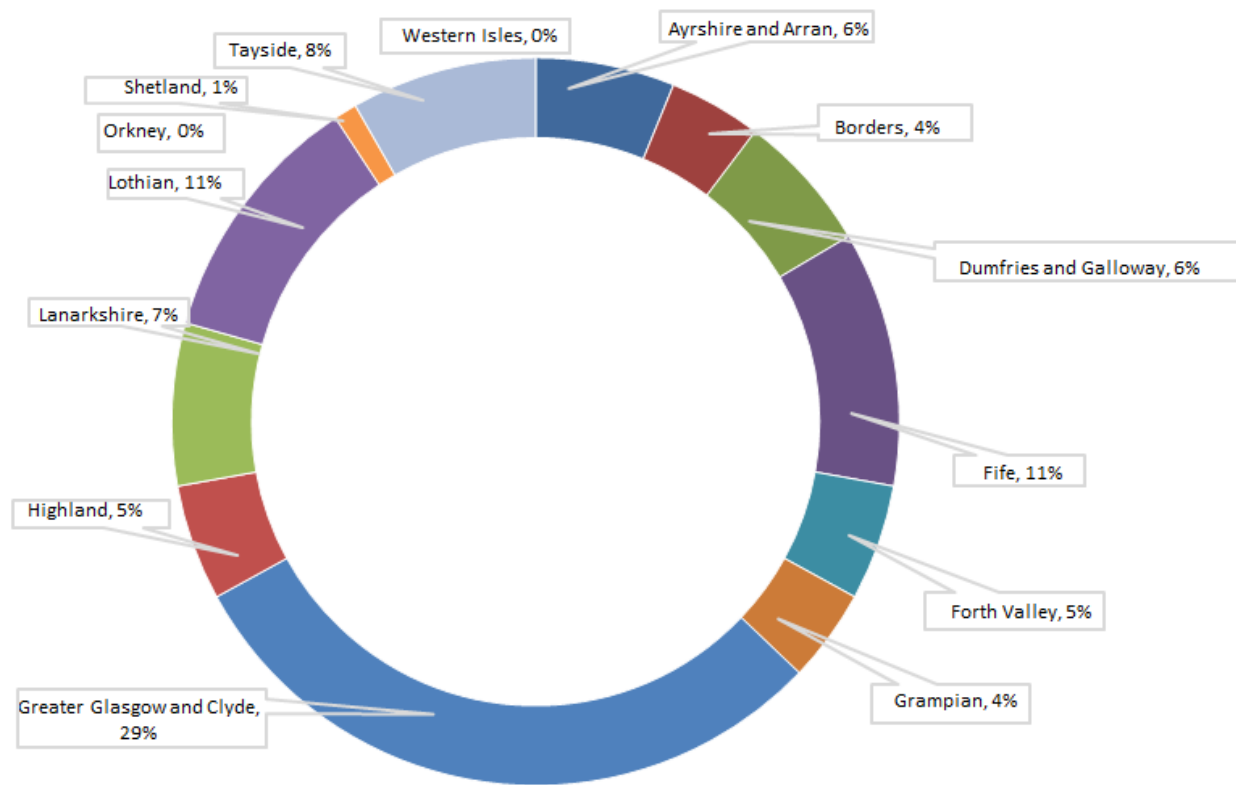
- Patients/site received CARE questionnaire at end of appointment with pharmacist (121 returned)
- Patient interviews regarding (e.g.) experience , expectations , and comparison with non-pharmacist consultations (n=24)
- Site pharmacists and other staff members interviewed (n=18)

Deliverable 1 – Workforce Development (GP Pharmacy Team)

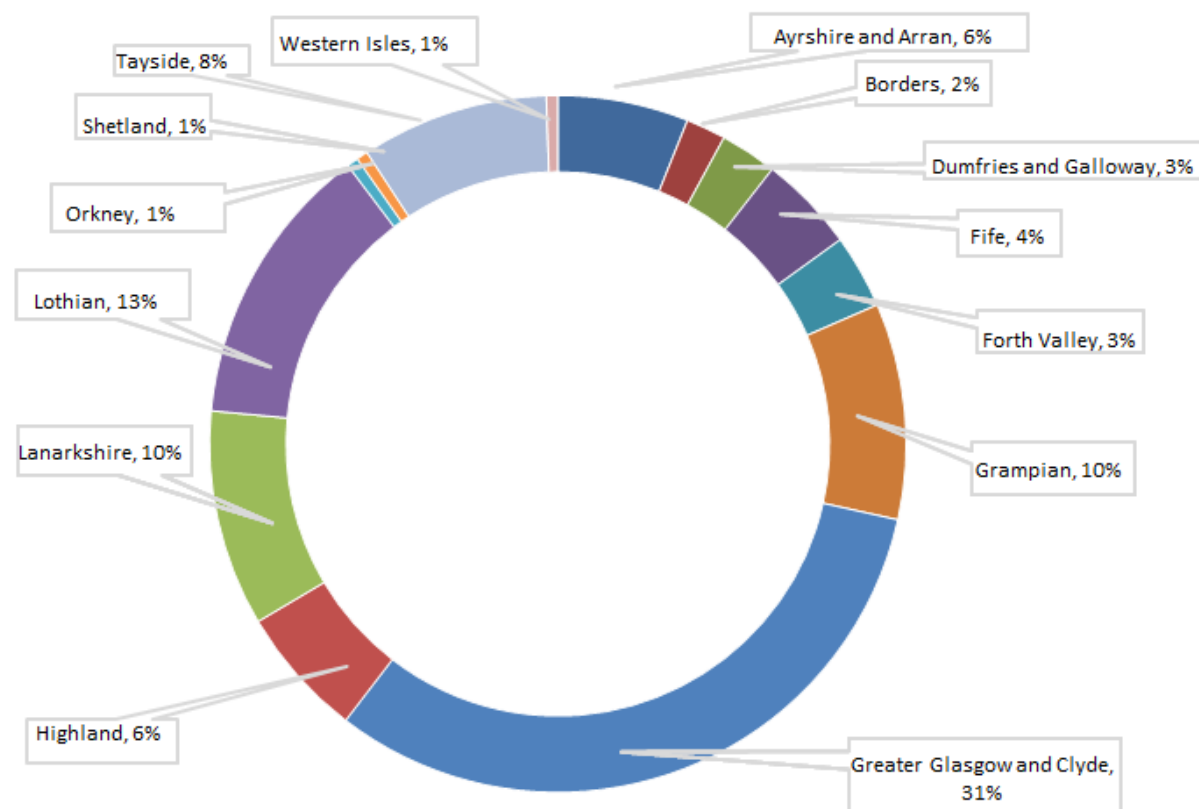


Pharmacy Teams by NHS Healthboard

Pharmacy Technicians who responded (n=101) by Health Board



Pharmacists who responded to the survey (n=393) by Health Board



Workforce Characteristics

Workforce

Female



30 - 39 years
old



20 years
qualified



Up to 4 years
experience in
GP Practices



Prescribers



Workforce Characteristics

TECHNICIANS

90%

35%

35%

66%

Workforce

Female



30 - 39 years
old



20 years
qualified



Up to 4 years
experience in
GP Practices



Prescribers



PHARMACISTS

83%

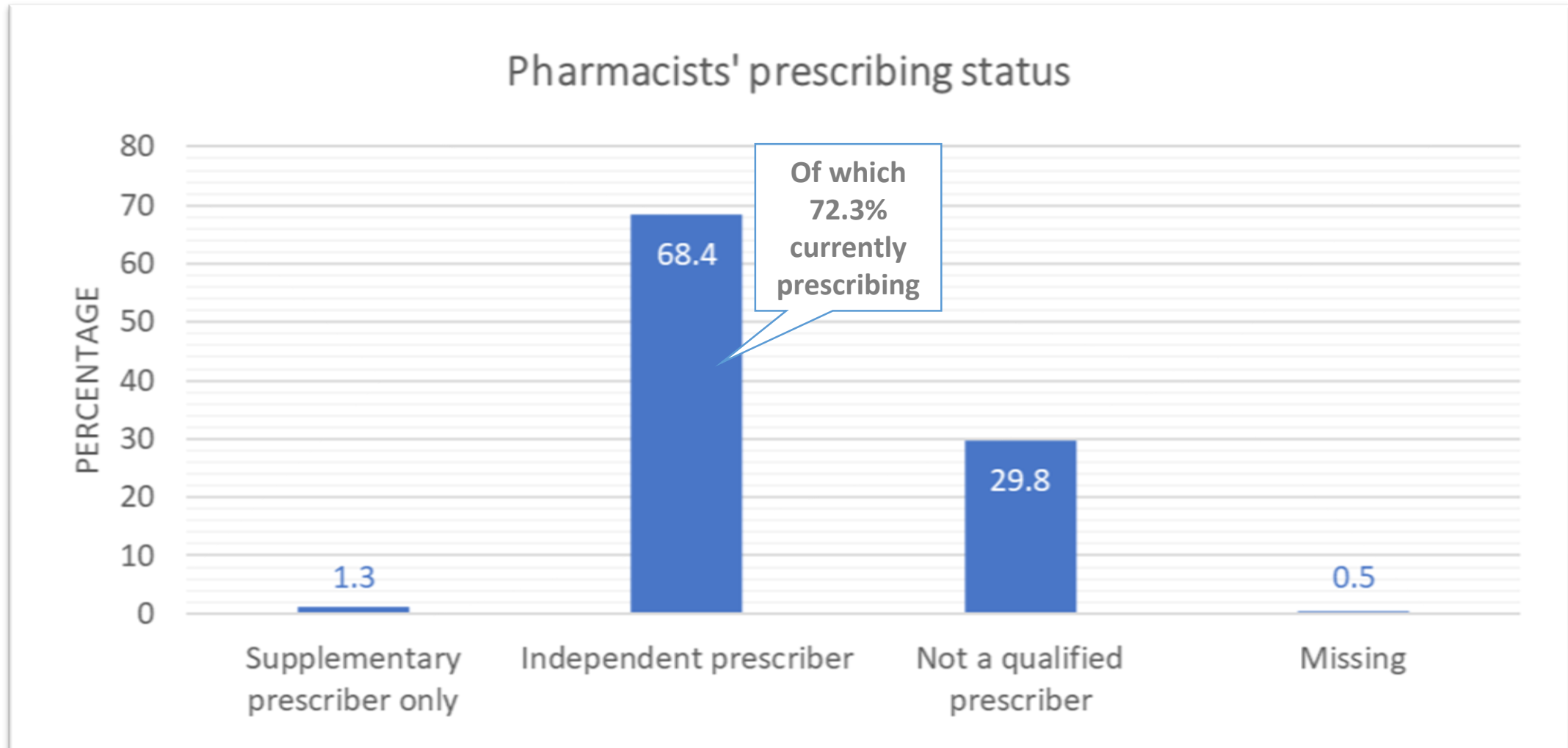
34%

42%

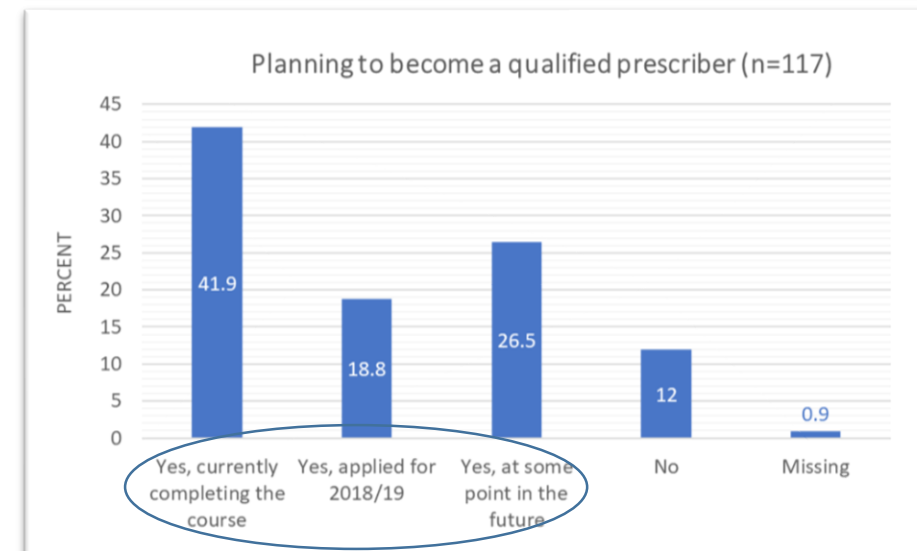
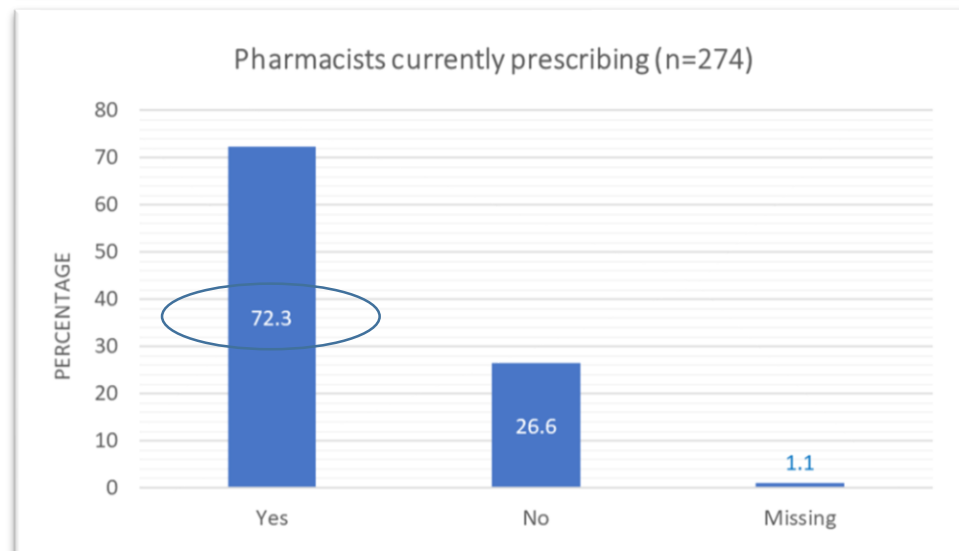
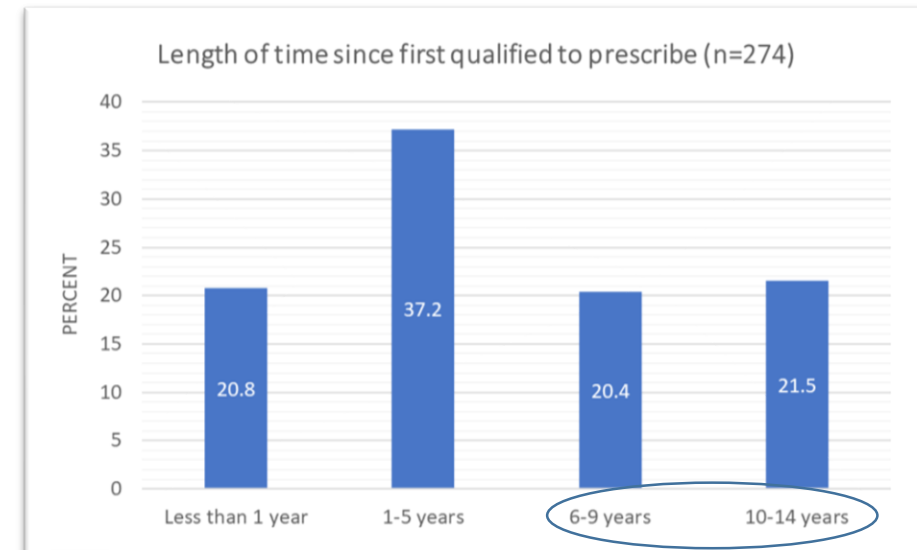
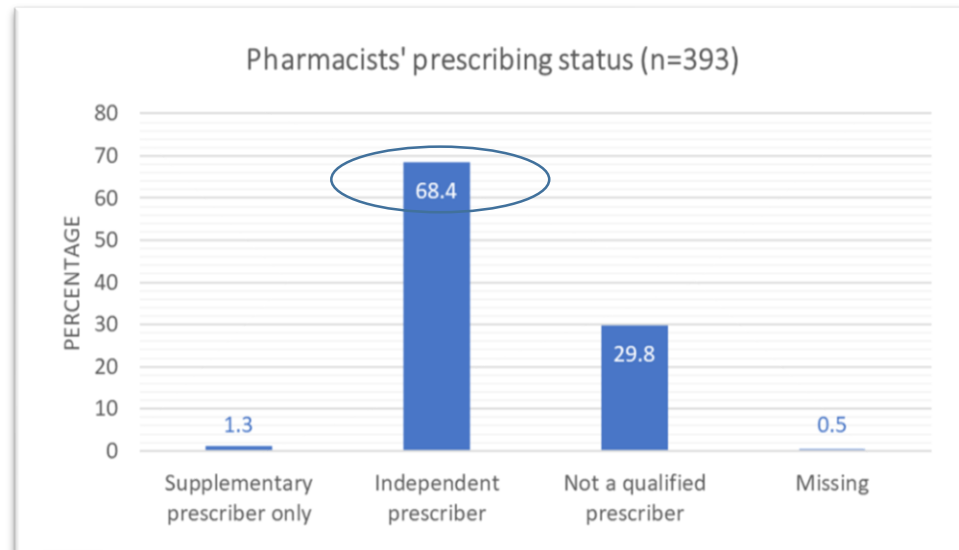
57%

68%

Overview of Pharmacists' Prescribing Status



In-depth Picture of Pharmacists' Prescribing Status



Pharmacy Teams' Employment Status

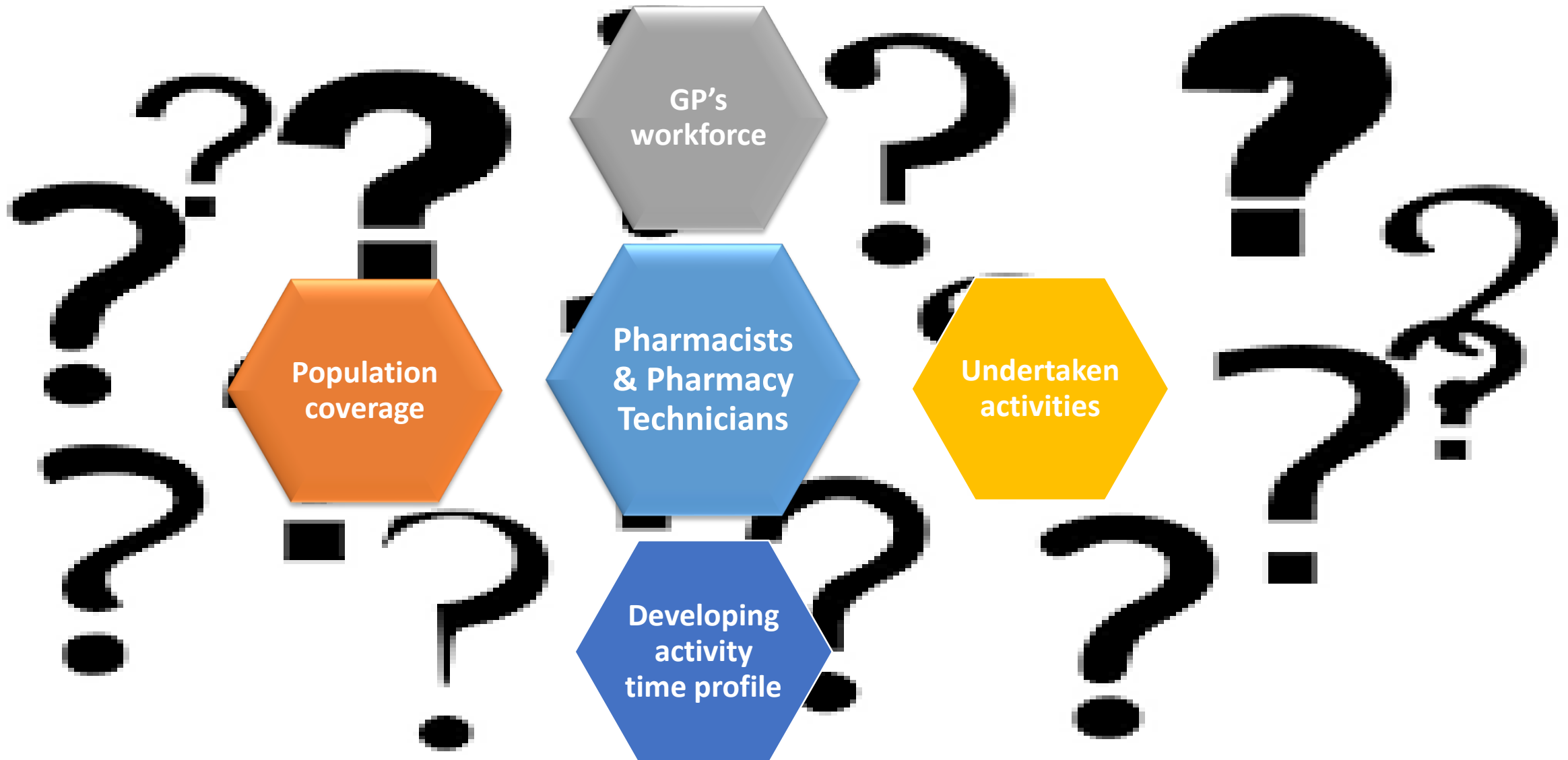
TECHNICIANS

- 45.5% permanent full time
- 87.1% funded by Health Board
- 82.2% AfC Band 5
- 83.2% at least one qualification

PHARMACISTS

- 50.9% permanent part time
- 91.6% funded by Health Board
- 46.6% AfC Band 7
- 65.2% have up to four postgraduate qualifications

Deliverable 2 – Service Activity



Employment in General Practice – number of sites covered

PHARMACISTS



393 pharmacists,
202.3 wte

TECHNICIANS



101 technicians,
57.3 wte

Employment in General Practice – number of sites covered

PHARMACISTS



Up to 29 sites
(median 2,
IQR 2-5)

393 pharmacists,
202.3 wte

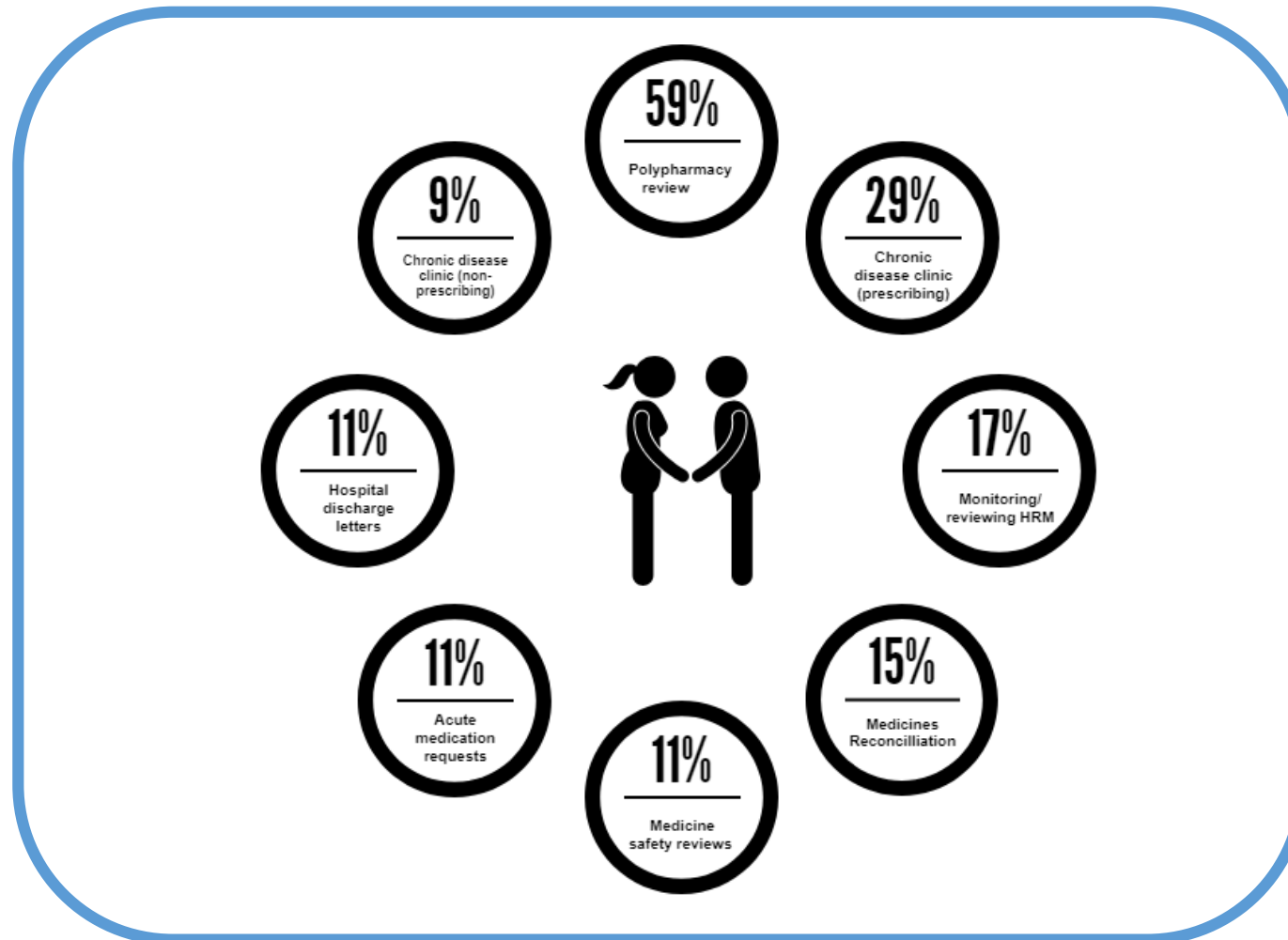
TECHNICIANS



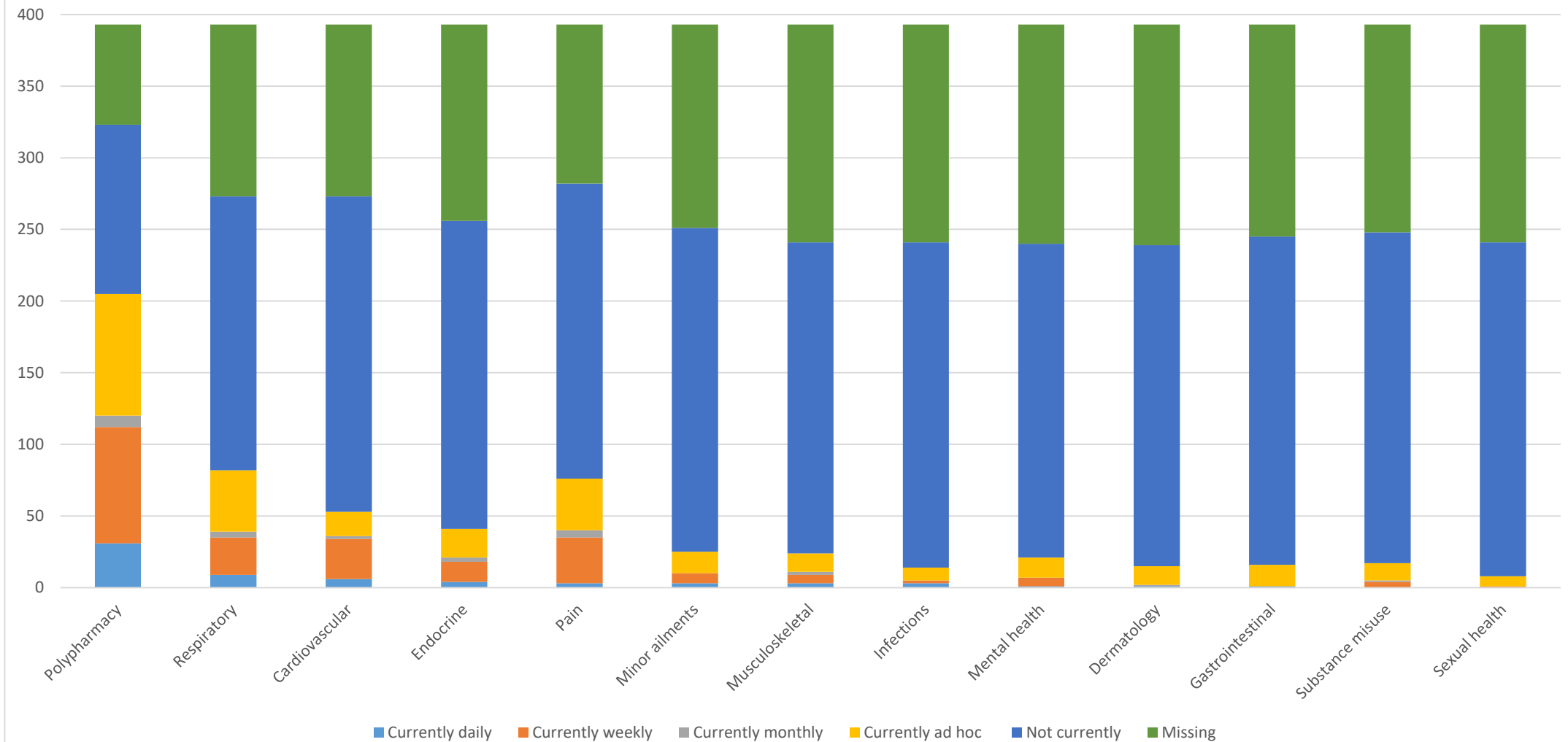
Up to 54 sites
(median 5,
IQR 3-8)

101 technicians,
57.3 wte

Pharmacists' Undertaken Duties (face-to-face)



Pharmacists in clinics in GP Practices



Pharmacists' Additional Roles in GP Practices

Activity (n=393)	Currently undertaking n (%)	Not currently undertaking but planned for next 12 months n (%)	Not planned n (%)	Missing n (%)
Prescribing efficiency work	297 (75.6)	16 (4.1)	31 (7.9)	49 (12.5)
Interpreting prescribing data e.g. PRISMS* or STU** reports	283 (72.0)	28 (7.1)	26 (6.6)	56 (14.2)
Providing training for other staff	237 (60.3)	33 (8.4)	62 (15.8)	61 (15.5)
Audit/service improvement work	233 (59.3)	37 (9.4)	53 (13.5)	70 (17.8)
Care home support e.g. medicines review/management	204 (51.9)	59 (15.0)	68 (17.3)	62 (15.8)
Prescribing management processes e.g. repeat prescribing systems	133 (33.8)	53 (13.5)	135 (34.4)	72 (18.3)
Teach and Treat clinics	61 (15.5)	49 (12.5)	189 (48.1)	94 (23.9)
Academic research	16 (4.1)	22 (5.6)	257 (65.4)	98 (24.9)
Other	31 (7.9)	1 (0.3)	82 (20.9)	279 (71.0)

*Prescribing Information System for Scotland

Pharmacy Technicians' Undertaken Duties (not face-to-face)



Pharmacy Technicians' Additional Roles in GP Practices

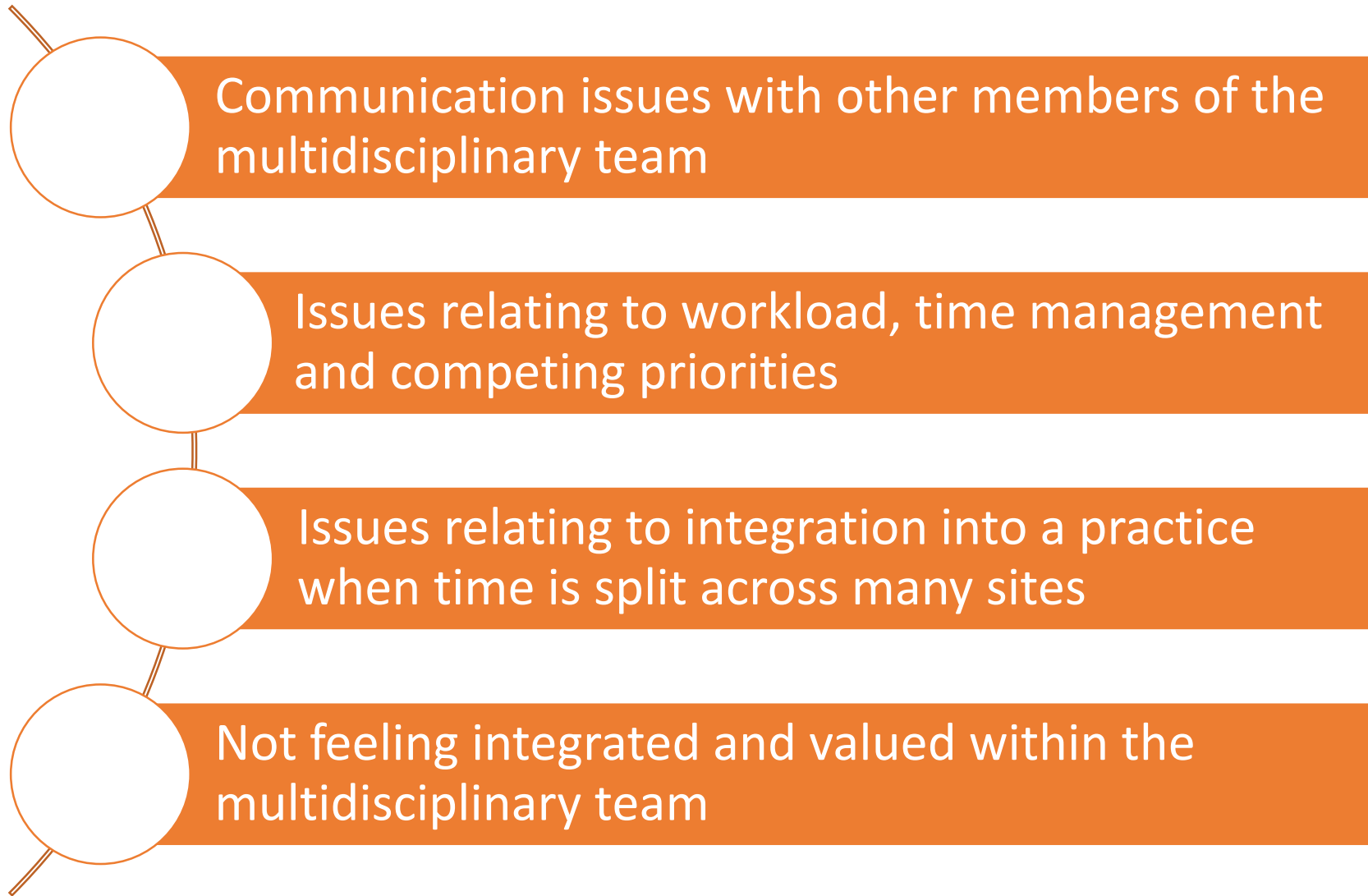
Activity (n=101)	Currently undertaking n (%)	Not currently undertaking but planned for next 12 months n (%)	Not planned n (%)	Missing n (%)
Prescribing efficiency work	80 (79.2)	0 (0.0)	2 (2.0)	19 (18.8)
Interpreting prescribing data e.g. PRISMS or STU reports	69 (68.3)	6 (5.9)	3 (3.0)	23 (22.8)
Providing training for other staff	56 (55.4)	13 (12.9)	10 (9.9)	22 (21.8)
Audit/service improvement work	58 (57.4)	3 (3.0)	13 (12.9)	27 (26.7)
Care home support e.g. medicines review/management	50 (49.5)	18 (17.8)	12 (11.9)	21 (20.8)
Prescribing management processes e.g. repeat prescribing systems	49 (48.5)	4 (4.0)	21 (20.8)	27 (26.7)
Academic research	3 (3.0)	2 (2.0)	56 (55.4)	40 (39.6)
Teach and Treat clinics	0 (0)	2 (2.0)	60 (59.4)	39 (38.6)
Other	6 (5.9)	0 (0)	16 (15.8)	79 (78.2)

* no missing values are provided as participants could select multiple responses

Pharmacists' Challenges in GP Practices



Pharmacy Technicians' Challenges in GP Practices



Estimate of Time Spent on Duties

	Polypharmacy Consultation Duration	
Health Board	NHS 1	NHS 2
Time period (number of events)	September 2016 to October 2017 (n=67)	March 2017 to January 2018 (n=1196)
Duration (mins): Median (IQR)	32 (27-37)	30 (15-45)

	Acute Medication Requests	
Health Board	NHS 1	NHS 2
Time period (number of events)	July 2016 to October 2017 (n=7,250)	January 2017 to February 2018 (n=8,506)
Duration (mins): Median (IQR)	3 (2-6)	8.6 (6-12)

			NHS 1 (32 mins/ review)		NHS 2 (30 mins/review)		POLYPHARMACY GUIDANCE 2018			
							Min (40 mins)		Max (120 mins)	
Scenario	Age	Number of Patients	WTE	WTE 5%	WTE	WTE 5%	WTE	WTE 5%	WTE	WTE 5%
Scenario 1: NHS Scotland Patients who have been dispensed medicines from 10 or more BNF sections, including at least one high risk medicine	50+	272,442	84.2	4.2	79.0	3.9	105.3	5.3	315.9	15.8
	65+	189,789	58.7	2.9	55.0	2.8	73.3	3.7	220.0	11.0
	75+	108,683	33.6	1.7	31.5	1.6	42.0	2.1	126.0	6.3
Scenario 2: SPARRA patients aged 50 years and older, residing in a care home. These patients have any risk score (1%-99%).	50+	30,483	9.4	0.5	8.8	0.4	11.8	0.6	35.3	1.8
Scenario 3: SPARRA patients with a risk score of 40-60% who were dispensed items from 10 or more BNF sections	65+	54,190	16.8	0.8	15.7	0.8	20.9	1.0	62.8	3.1
	75+	42,882	13.3	0.7	12.4	0.6	16.6	0.8	49.7	2.5

^[1] In order to reflect the variation in proportion of eligible population to be targeted we have given an example of WTE requirement if only 5% of eligible patients were targeted.

^[2] Data from NHS Scotland Prescription Information System dataset. Figure reflects the number of patients in NHS Scotland who received meds from 10+ BNF sections and one high risk med in the 6 months before December 2017

^[3] SPARRA (Scottish Patients At Risk of Readmission and Admission) data for the 1st May, 2017.

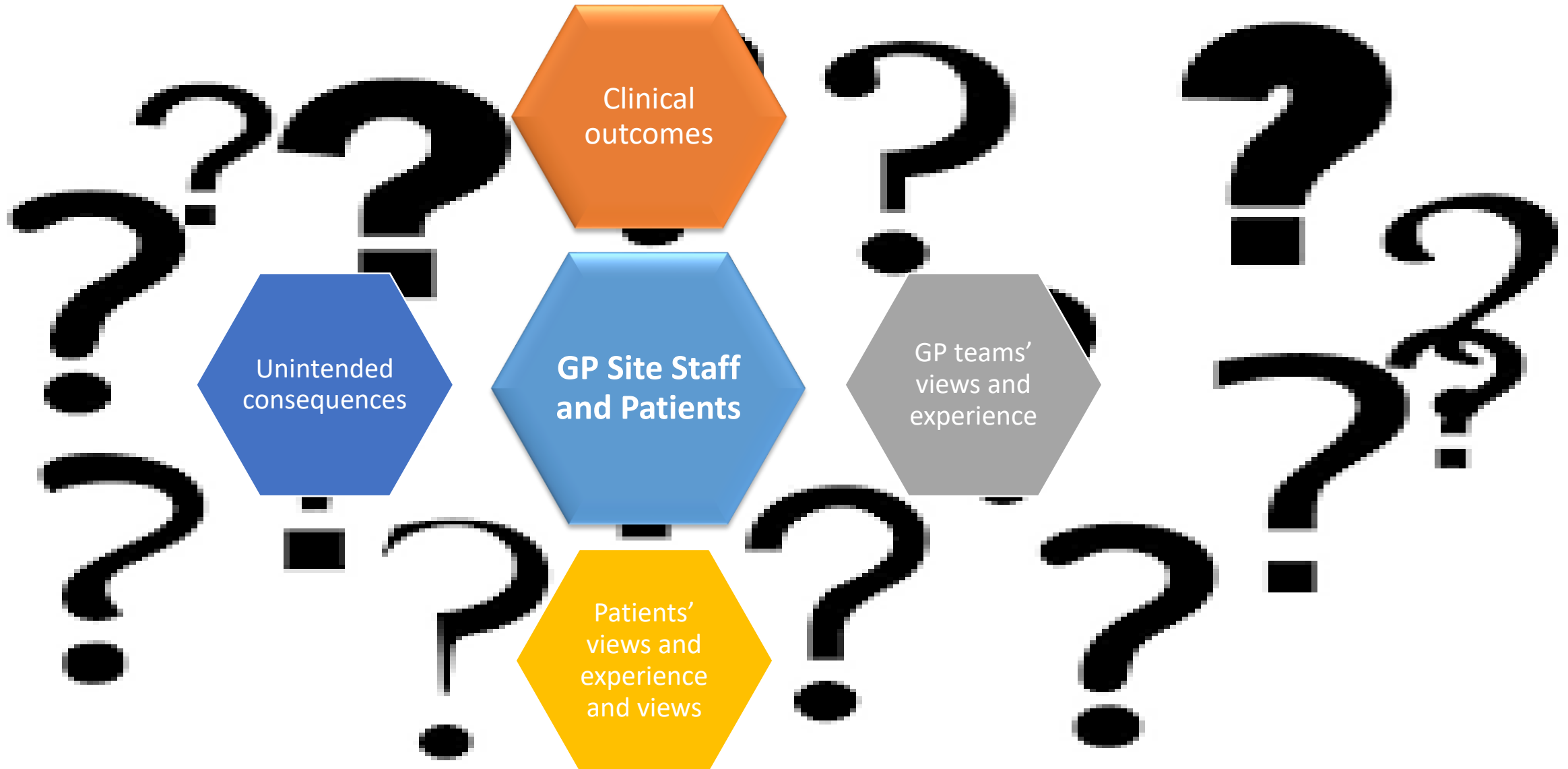
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Deliverable 3 – Service and Patient Outcomes



Pharmacists' Experiences and Views

Clinical role

- time
- knowledge base

Integration into GP practice

- training
- acceptance of pharmacist
- awareness of roles

Knowledge of patients' conditions

- point of contact
- access to records

Role expectations

- network
- multidisciplinary teams

Career intentions

- setting
- opportunities
- ambitions

Patients' Experiences and Views

Patient expectations

- openness to change
- personalised care

Professional recognition

- acceptability
- multi-disciplinary team
- scope of practice

Healthcare Teams' Experiences and Views

Clinical role

- impact of pharmacist input to medication reviews
- monitoring of conditions
- medicines expert
- impact on GP workload

Integration into GP practice

- acceptance of pharmacist by patients and staff
- awareness of pharmacist roles
- role expectations
- point of contact

Evaluations' Challenges

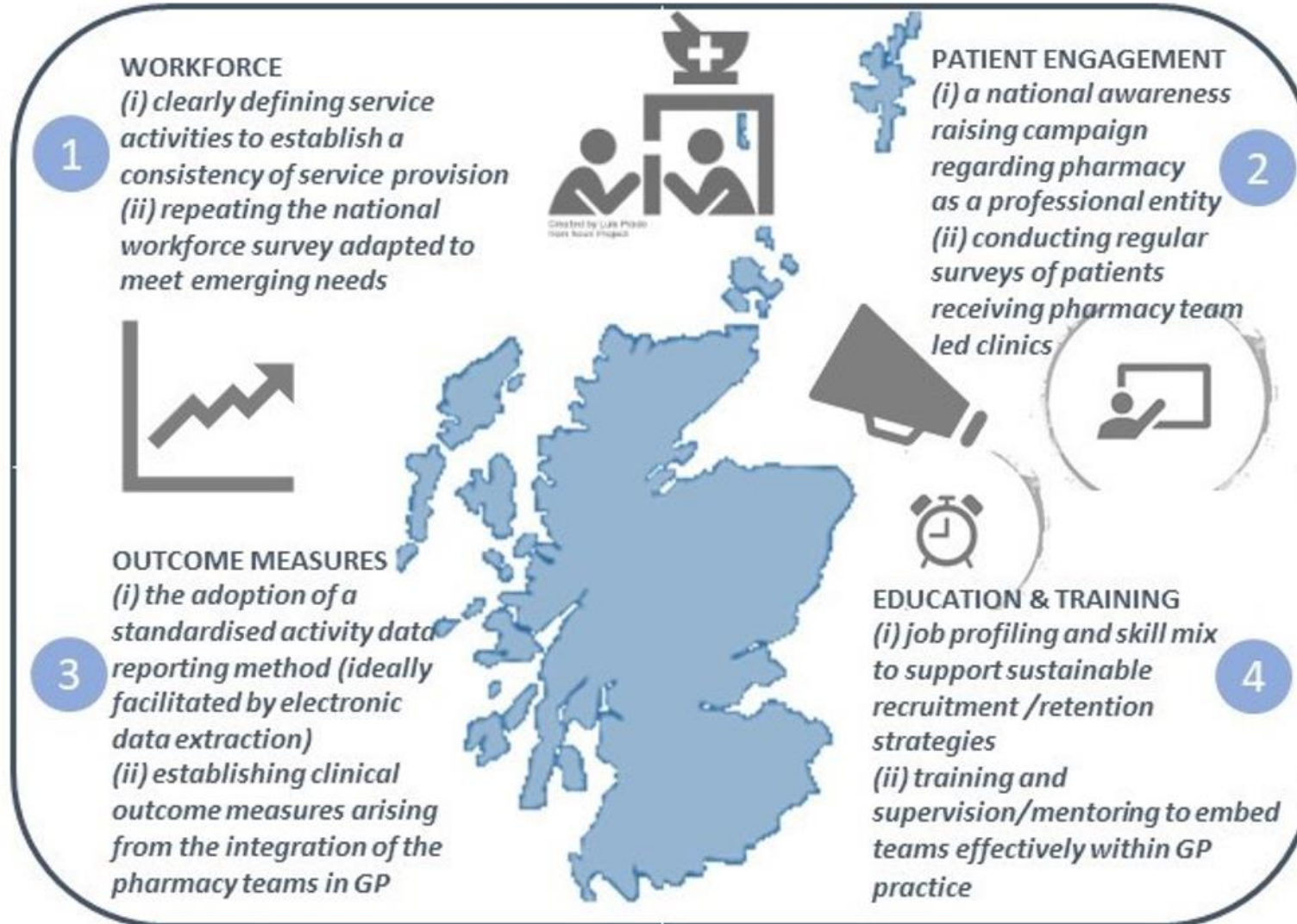
Paucity of routinely collected data

- Lack of clinical outcome data collected to evidence benefits or unintended consequences
- Limited data denoting time profile of undertaken activities
- Unable to estimate GP time released.

Data collection methods

- WP1 and WP3 data may have been influenced by social-desirability bias and/or acquiescence bias.
- Validity of the self-reported data (WP1 and WP2) could not be confirmed.
- WP1 questionnaire (WP1) was long due to the exploratory nature of the project.
- Scheduling of patient, pharmacist and their GP Practice colleagues for interview was challenging

Recommendations



EXTRA SLIDES

Time Spent on Duties (WP2 Data Collection)

– may want to omit/ talk about as part of

last slide

Health Board	Data Collection Method	Time period for data collection	Number of GP sites covered (number of pharmacists)	Polypharmacy clinic		Acute medication requests	
				Time per encounter GP sites (pharmacists)	Outcome indicator GP sites (pharmacists)	Time per prescription GP sites (pharmacists)	Outcome indicator GP sites (pharmacists)
NHS 1	Computer-led data collection	July 2016 – October 2017	15 (16 pharmacists)	4 sites (5 pharmacists)	4 sites (5 pharmacists)	3 sites (8 pharmacists)	3 sites (8 pharmacists)
NHS 2	Self-report (Excel spreadsheet)	January 2017 – February 2018	63 (38 pharmacists)	43 sites (30 pharmacists)	27 sites (20 pharmacists)	32 sites (21 pharmacists)	28 sites (20 pharmacists)