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CONNECTING AUSTRALIAN HEALTHCARE

# 2022 Interoperability Benchmark Survey

June 2022





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# Contents

1. Background and summary of findings
2. Methodology and sampling
3. Digital adoption
4. Overall digital maturity
5. Digital maturity by setting
6. Healthcare provider interactions
7. Information transfer
8. Benefits and barriers to interoperability
9. Digital health usage



## Section 1:

# Background and summary of findings

# Background

The *Connecting Australian Healthcare – National Healthcare Interoperability Plan 2023-2028* (Interoperability Plan) is Australia's first national plan to deliver a connected healthcare system. The Interoperability Plan includes five priority areas relating to identity, standards, information sharing, innovation and benefits.

An action under the benefits priority area is to undertake a periodic survey to measure interoperability, starting with a baseline survey in 2022.

In 2022 the Australian Digital Health Agency commissioned fiftyfive5 to undertake the baseline interoperability survey. It is the first national interoperability survey with a total of 2,989 responses from Australian health care professionals working in public and private hospitals, community pharmacy, general practice, allied health, specialist and aged care organisations.



# Summary of findings



## PUBLIC HOSPITAL

Those working in a public hospital, mostly nurses and specialists, are very **open to doing things more digitally**.

**Frequency of information transfer** is **significantly lower** in public hospitals, and receiving, sending and integrating information is more **dependent on paper, spoken and manual methods**. There is **momentum** around **using digital** and automatic processes but the **transition is slower** than other settings.

**Benefits of interoperability** for those working in a public hospital are **better clinical decision making** and improving the **safety** of the system, while barriers include **system and workflow issues** such as the seamless integration of systems.



## PRIVATE HOSPITAL

Those working in a private hospital, mostly specialists and nurses, are **more reliant on email/SMS and paper/fax** for finding, sending and receiving information and processes are mostly **manual** for integrating data.

Like public hospitals, private have **gained momentum** around using digital and automatic processes but the **transition is slower**.

Key **benefits** of interoperability include **better coordination of care** between HCPs and **faster and easier** access to relevant information, while **lacking the technology required** is a significantly stronger **barrier** to interoperability for private hospitals.



## GP PRACTICE

Those working in a GP practice are **less likely to be open** to digital ways of working.

However, the high **frequency of information** means they are **using digital systems and automatic processes** more than other settings.

GP practices are ahead of the curve with **significant momentum** behind the use of digital systems and automation over the last 3 years.

Key **benefits** of interoperability for a GP practice include **faster and easier** access to relevant information and **better coordination of care** between HCPs, while the **inability to access information and privacy and safety** of information are key barriers.



## COMMUNITY PHARMACY

Those working in community pharmacies are **very open** to doing things more digitally.

This group are **frequently** finding/querying and receiving information from other health service providers but are **more likely to be using email/SMS** for sending/receiving and **spoken methods for finding/querying**.

Despite lower current use of digital systems, **momentum** behind digital is **growing significantly**.

For pharmacies, **reducing** the number of **manual errors** made is a **key benefit** of data interoperability, while **lack of use** by HCPs, **inability to access information** and **poor internet connection** are key barriers.



## SPECIALIST PRACTICE OUTSIDE HOSPITALS

Those working in specialist practices outside hospitals, are finding/querying, sending, receiving and integrating information from other health providers **at a high frequency**.

This group are **more progressive** when it comes to **using digital systems** and momentum over the last 3 years is strong.

This group see the **benefit of improved practice efficiency**, while **fragmentation/use of different systems** across healthcare professionals is the key perceived barrier to interoperability.



## ALLIED HEALTH OUTSIDE HOSPITALS

Those working in allied health practices outside hospitals are **less open** to doing things **digitally**.

Information transfer is **less frequent** and mostly reliant on **email/SMS** for finding/sending and receiving information. A large proportion also indicate **integration processes are always manual**.

There is momentum behind the use of digital systems but the **transition is much slower**.

This group also see the **benefit of improved practice efficiency**, but there are **significant barriers** at play including; implementation **costs**, practice **lacking technology**, ongoing maintenance costs, and **preference for non-digital methods**.





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## Section 2:

# Methodology and sampling

# Methodology and sampling

## SAMPLE RESULTS

n=2,989 interviews profile as:



Public  
Hospital

Private  
Hospital

GP Practice

Community  
Pharmacy

Specialist  
Practice  
Outside  
Hospitals

Allied Health  
Outside  
Hospitals

Residential  
aged care

TOTAL  
PROFESSIONS



Pharmacists

61

31

1

508

3

2

5

611



Nurses

291

97

114

1

46

22

14

585



GPs

3

3

415

0

1

3

1

426



Allied health  
professionals

49

13

33

1

20

391

10

517



Medical Specialists

377

121

2

0

298

7

1

806



Aged care  
nurse/assistant

1

0

0

0

1

1

12

15



Other Professions\*

17

3

1

0

6

2

0

29

TOTAL SETTINGS

799

268

566

510

375

428

43

2,989

NOTE: TOTAL HCP INCLUDES ALL n=2,989 RESPONSES

## METHOD

Respondents completed a **18 minute** online quantitative survey through any device

The **survey flowed:** screener, digital maturity, digital interactions, information sharing, benefits/ barriers of interoperability, and demographics

**Fieldwork** was conducted from 27 April 2022 until 27 June 2022

## SAMPLING FRAMEWORK

Sample sourced from a reputable online panel named Ekas; we interviewed n=2,989 Australian health care professionals to discuss their interoperability needs and experiences

The target group was defined by their **occupation** and the **setting they work in**















\*Other professions include Health Management, CEO/DCS, Contracts Manager, Procurement Manager, Hospital Medical Officer, Social Worker, Registrar specialist, Health Information Services, RMO, Junior medical officer, Clinical Coder



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# Sampling achievements - jurisdictions

PRIMARY WORK SETTING AND PROFESSIONS BY JURISDICTIONS (n)	Public Hospital	Private Hospital	GP Practice	Community Pharmacy	Specialist Practice Outside Hospitals	Residential Aged Care	Allied Health Outside Hospitals	TOTAL	Pharmacists	Nurses	GP	Allied Health	Medical Specialist	Aged Care Nurse Or Geriatrician	Other Profession*	TOTAL
																
NSW	269	84	184	189	136	14	186	1062	221	191	130	221	287	4	8	1062
VIC	246	82	148	134	117	12	122	861	165	179	113	143	251	5	5	861
QLD	135	53	115	98	74	12	73	560	116	98	95	93	144	5	9	560
SA	69	8	35	28	27	2	18	187	38	44	26	23	54	1	1	187
WA	53	30	67	45	14	1	16	226	51	48	48	22	52	0	5	226
TAS	15	7	9	12	5	1	3	52	15	14	7	6	10	0	0	52
ACT	6	2	6	2	1	1	7	25	2	7	6	7	3	0	0	25
NT	6	2	2	2	1	0	3	16	3	4	1	2	5	0	1	16
AU Metro	685	244	475	423	336	35	344	2542	516	474	356	423	736	12	25	2542
AU Regional/Rural	114	24	91	87	39	8	84	447	95	111	70	94	70	3	4	447
<b>TOTAL</b>	<b>799</b>	<b>268</b>	<b>566</b>	<b>510</b>	<b>375</b>	<b>43</b>	<b>428</b>	<b>2989</b>	<b>611</b>	<b>585</b>	<b>426</b>	<b>517</b>	<b>806</b>	<b>15</b>	<b>29</b>	<b>2989</b>

\*Other professions include Health Management, CEO/DCS, Contracts Manager, Procurement Manager, Hospital Medical Officer, Social Worker, Registrar specialist, Health Information Services, RMO, Junior medical officer, Clinical Coder



# Sampling achievements - allied health

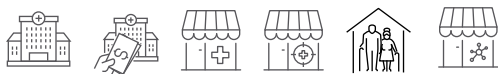


**ALLIED HEALTH PROFESSIONALS  
BY SETTINGS**

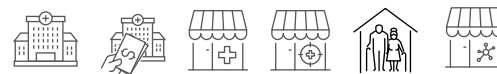
	Public Hospital	Private Hospital	GP practice	Community Pharmacy	Specialist Practice outside hospitals	Residential aged care	Allied health outside hospitals	TOTAL
Audiologist	1	0	0	0	0	1	7	9
Chinese Medicine Practitioner	0	0	0	0	0	0	0	0
Chiropractor	0	0	1	0	0	0	64	65
Counsellor	0	0	0	0	0	0	2	2
Dentist	4	0	20	0	4	0	60	88
Dietitian	27	1	9	1	3	3	46	90
Exercise Physiologist	0	0	0	0	0	0	3	3
Medical radiations	3	3	0	0	0	0	1	7
Occupational Therapist	4	1	0	0	0	1	24	30
Optometrist	0	0	0	0	2	1	90	93
Osteopath	0	0	0	0	0	1	3	4
Physiotherapist	4	4	2	0	2	3	41	56
Podiatrist	2	0	1	0	0	0	4	7
Psychologist	1	1	0	0	1	0	12	15
Social Worker	0	0	0	0	1	0	3	4
Speech Pathologist	0	0	0	0	0	0	7	7
Ultra-sonographer	1	2	0	0	0	0	1	4
Naturopath	0	0	0	0	3	0	9	12
Nutritionist	0	0	0	0	0	0	5	5
Therapist	0	0	0	0	1	0	4	5
Orthodontist	1	0	0	0	1	0	1	3
Immunology	1	0	0	0	0	0	0	1
Other allied health	2	1	0	0	2	0	4	9
<b>Total no of surveys</b>	<b>51</b>	<b>13</b>	<b>33</b>	<b>1</b>	<b>20</b>	<b>10</b>	<b>391</b>	<b>519</b>



# Sampling achievements - specialists



SPECIALIST PROFESSIONS BY SETTINGS	Public Hospital	Private Hospital	GP practice	Specialist Practice outside hospitals	Residential aged care	Allied health outside hospitals	TOTAL
Addiction medicine	1	0	0	0	0	0	1
Anaesthesia	19	19	0	0	0	0	38
Cardiology	21	14	0	19	0	0	54
Dermatology	2	4	0	36	0	0	42
Emergency medicine/intensive care	20	2	0	1	0	0	23
Emergency doctor at a hospital	5	1	0	0	0	0	6
Endocrinology	14	1	0	16	0	1	32
Gastroenterology	10	4	0	10	0	0	24
General Medicine Physician (Specialist, consultant, public health)	18	2	1	5	0	0	26
Geriatric medicine	15	1	0	4	1	0	21
Haematology	32	5	0	10	0	0	47
Hepatology	1	0	0	0	0	0	1
Intensive care medicine	11	2	0	0	0	0	13
Medical oncology	34	2	0	8	0	0	44
Neurology	15	6	0	12	0	0	33
Obstetrics and gynaecology	8	6	0	18	0	0	32
Ophthalmology	5	2	0	27	0	0	34
Orthopaedic surgeon	4	6	0	4	0	0	14
Pain medicine	2	1	1	1	0	0	5
Palliative medicine	3	0	0	2	0	0	5
Pathology	2	2	0	2	0	0	6
Paediatrics and child health	15	1	0	14	0	0	30
Physician	16	2	0	9	0	1	28



SPECIALIST PROFESSIONS BY SETTINGS	Public Hospital	Private Hospital	GP practice	Specialist Practice outside hospitals	Residential aged care	Allied health outside hospitals	TOTAL
Psychiatrist	27	8	0	37	0	0	72
Radiation oncology	6	3	0	0	0	0	9
Radiographer	1	0	0	0	0	0	1
Rehabilitation medicine	2	2	0	0	0	0	4
Sexual health medicine	4	0	0	4	0	0	8
Sport and exercise medicine	0	0	0	0	0	0	0
Surgery	12	17	0	22	0	0	51
Oral health therapist	0	0	0	0	0	4	4
Orthodontist	0	0	0	2	0	0	2
Respiratory	17	0	0	3	0	0	20
Rheumatology	9	0	0	23	0	0	32
Nephrology	13	2	0	1	0	0	16
Urology	4	5	0	4	0	0	13
Genetics	2	0	0	0	0	0	2
Immunology	2	0	0	0	0	0	2
gynaecology	0	0	0	1	0	0	1
Otolaryngology	0	0	0	2	0	0	2
Infectious diseases	0	1	0	0	0	0	1
Plastic surgeon	0	0	0	1	0	0	1
Other specialist	3	0	0	0	0	0	3
<b>Total no of surveys</b>	<b>375</b>	<b>121</b>	<b>2</b>	<b>298</b>	<b>1</b>	<b>6</b>	<b>803</b>



# METHODS WHEN DEALING WITH PATIENTS AND INFORMATION TRANSFER HAVE BEEN CLASSIFIED INTO FOUR MAIN TYPES



## SPOKEN

- In person
- Phone calls
- Video calls



## PAPER/FAX

- Paper
- Traditional/electronic fax



## EMAIL/SMS

- SMS message
- Email (including sending PDFs)
- File transfers
- Instant messaging, e.g.:  
WhatsApp, MS Teams Chat,  
Facebook Messenger



## DIGITAL SYSTEMS

- Clinical Information System (CIS)
- Mobile app
- Secure messaging system



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## Section 3:

# Digital adoption

# Most HCPs strongly agree that technology is important and are open to doing things more digitally



## TECHNOLOGY ADOPTION TOTAL HCP

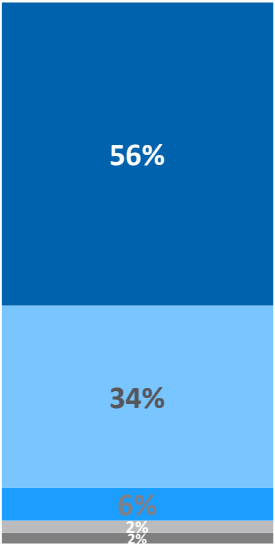
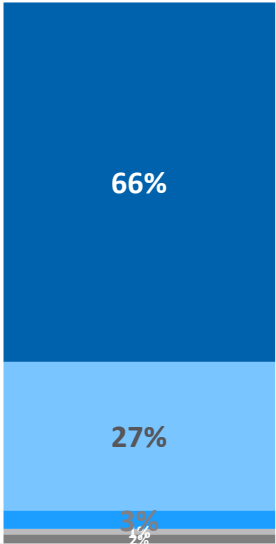
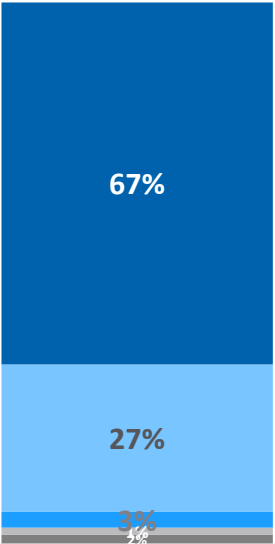
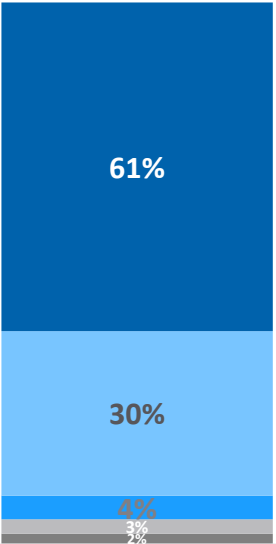
I am **very open to doing more things digitally** (e.g., apps, online self-service) for my business

I think it is **important that I understand how to use technology** to improve health outcomes

I think it is **important that healthcare professionals understand how to use technology** to improve everyone's health

I think that it is important for the **Government to focus on technology in health**

- 5 - Strongly agree
- 4 - Somewhat agree
- 3 - Neither
- 4 - Somewhat disagree
- 5 - Strongly disagree



Z1 To what extent do you agree or disagree with the following statements?  
Base: Total HCP Sample (n=2989)



# Over two thirds of healthcare professionals are technology advocates, scoring 18-20/20 on their attitudes to technology

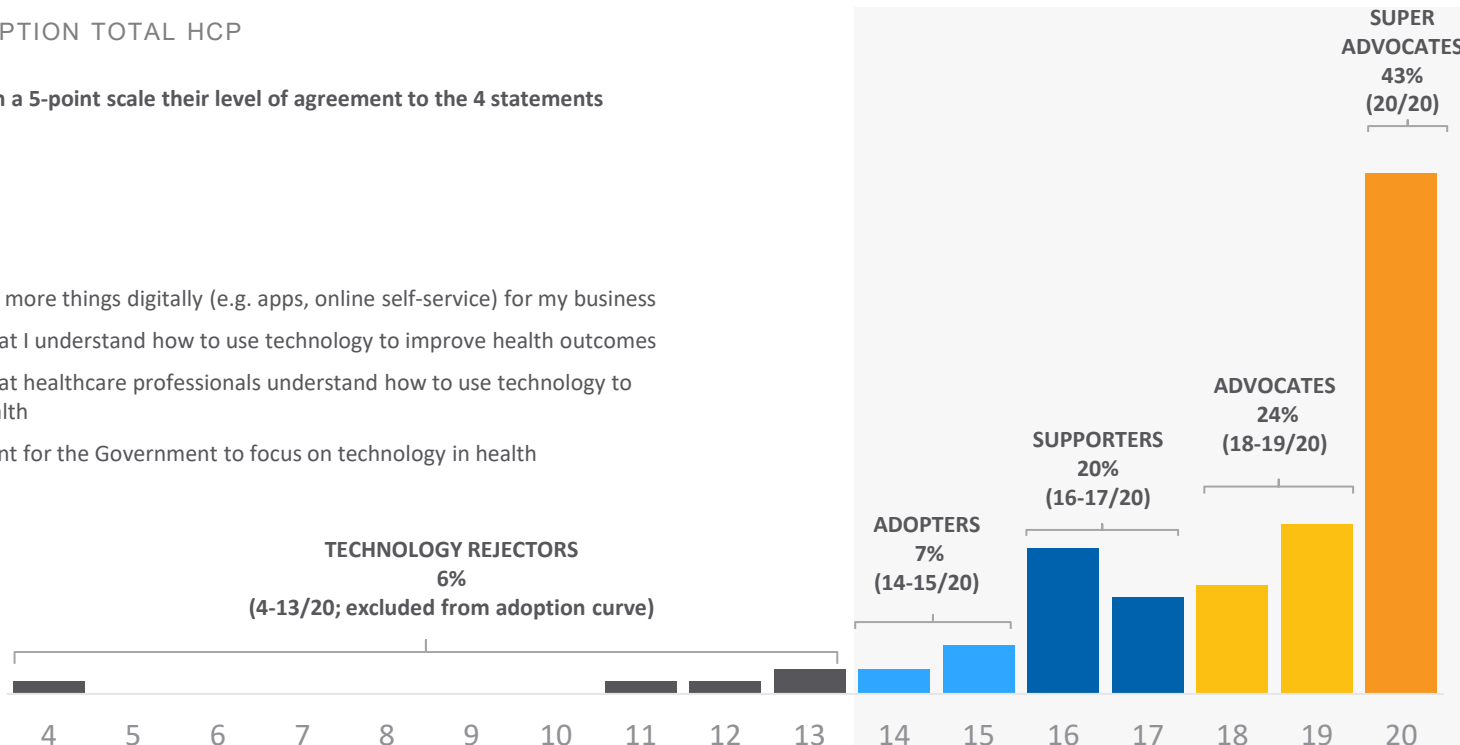


## TECHNOLOGY ADOPTION TOTAL HCP

Each person responded on a 5-point scale their level of agreement to the 4 statements

- Strongly disagree – 1
- Somewhat disagree – 2
- Neither – 3
- Somewhat agree – 4
- Strongly agree – 5

- I am very open to doing more things digitally (e.g. apps, online self-service) for my business
- I think it is important that I understand how to use technology to improve health outcomes
- I think it is important that healthcare professionals understand how to use technology to improve everyone's health
- I think that it is important for the Government to focus on technology in health

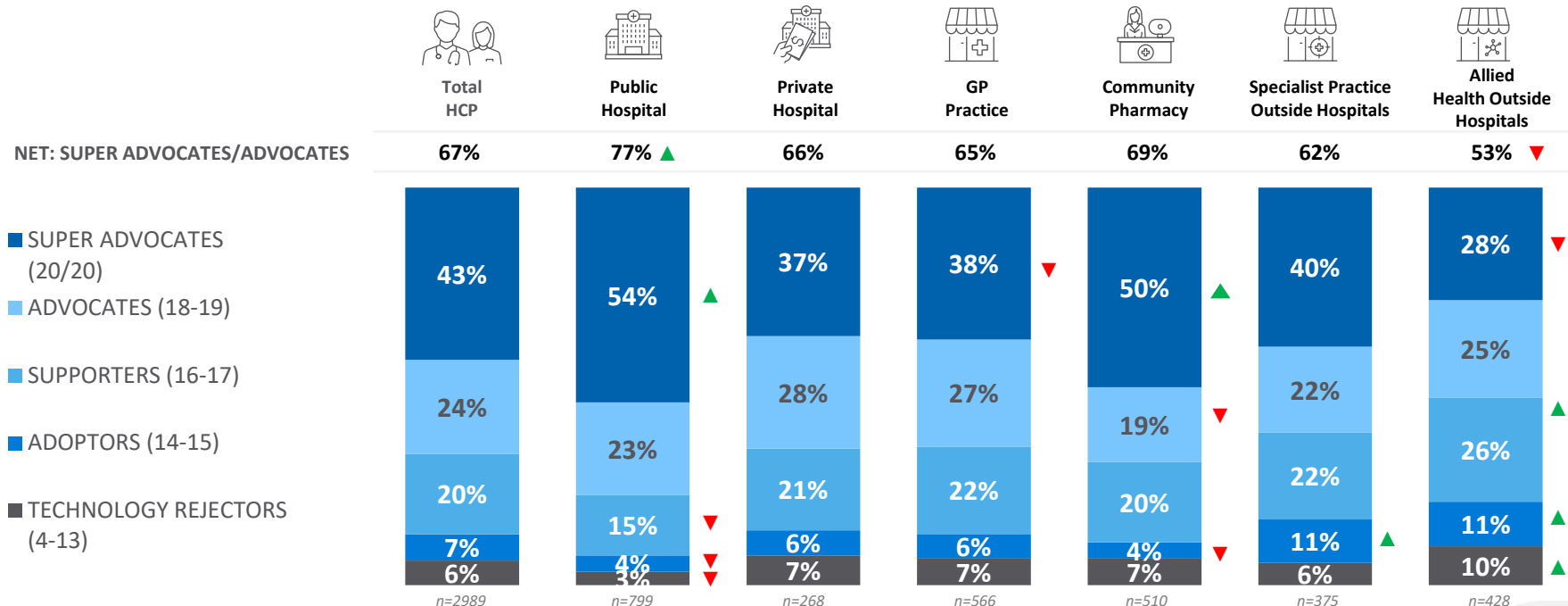


Z1 To what extent do you agree or disagree with the following statements?  
Base: Total HCP Sample (n=2989)



# Public hospitals and community pharmacies are ahead of the technology curve, while allied health lag behind

## TECHNOLOGY ADOPTION BY SETTINGS



Z1 To what extent do you agree or disagree with the following statements?

▲ ▼ Significantly higher/lower than settings at 95% confidence interval

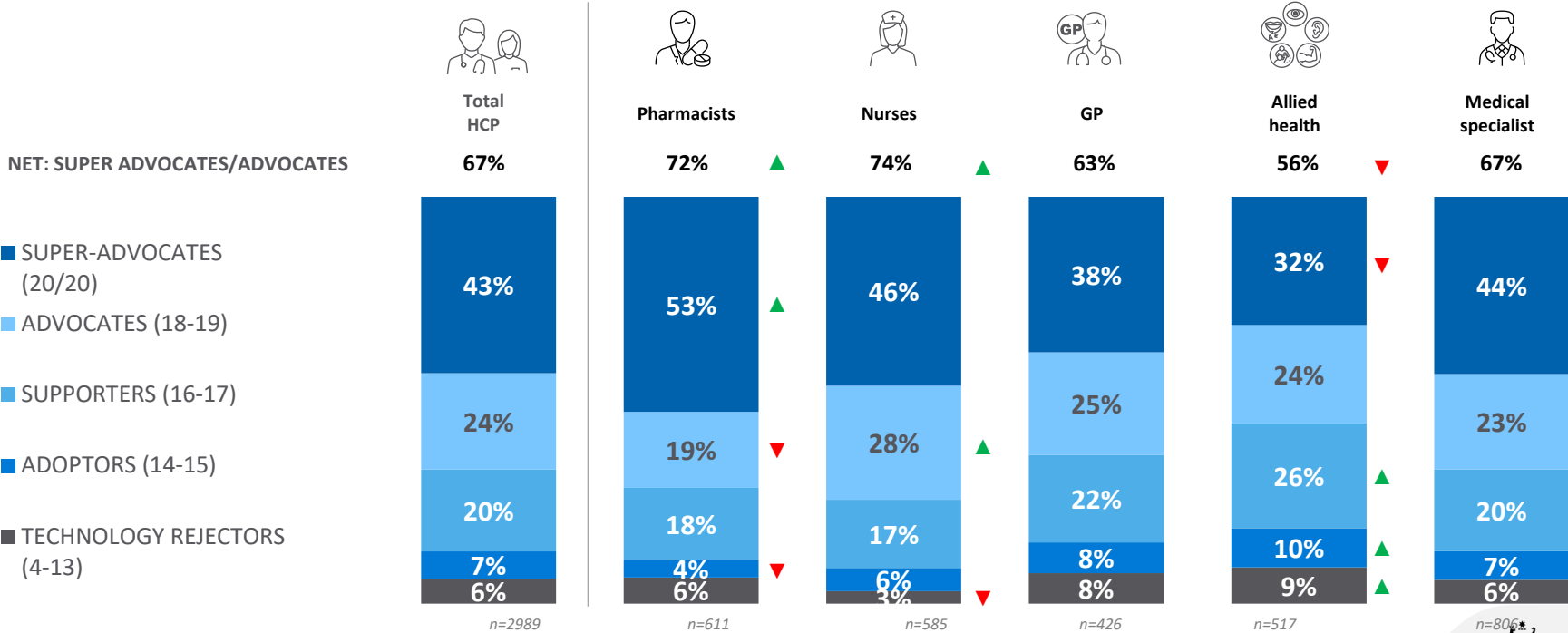


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# Pharmacists are ahead of the technology curve, while allied health and GPs lag behind

## TECHNOLOGY ADOPTION BY OCCUPATION



Z1 To what extent do you agree or disagree with the following statements?

▲ ▼ Significantly higher/lower than other group at 95% confidence interval



# Section 4:

## Overall digital maturity

# HCPS are dealing with patient record/clinical information several times a day; particularly receiving and integrating information



## INFORMATION TRANSFER FREQUENCY

**Find/query** information from sources outside your organisation

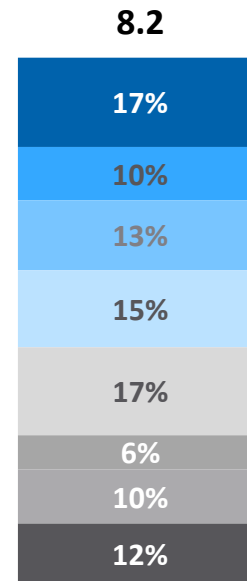
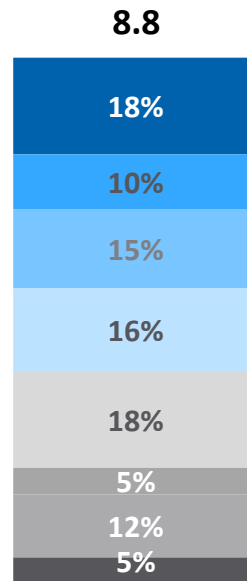
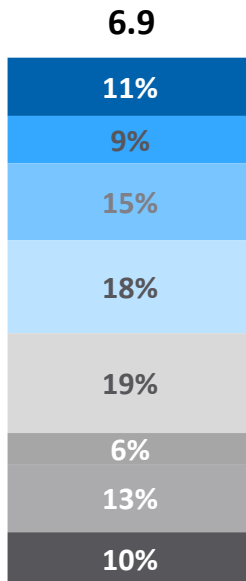
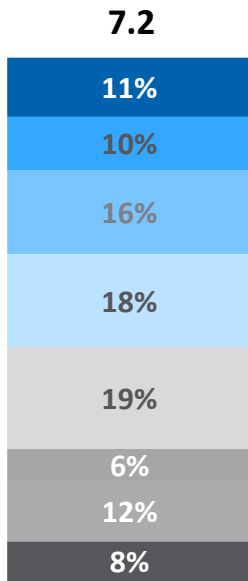
**Send** information to other health service providers outside your organisation

**Receive** information from other health service providers outside your organisation

**Integrate** the information received from other health service providers into your clinical systems

### AVERAGE FREQUENCY PER DAY

- 20+ times per day
- 11-19 times per day
- 7-10 times per day
- 4-6 times per day
- 2-3 times per day
- Once per day
- 2-3 times a week











A1 When dealing with patient records/clinical information using any method (digital and non-digital), how frequently do you...?  
Base: Total HCP Sample (n=2989)



# HCPs working in community pharmacies, GP and specialist practices are more likely to be finding, sending, receiving and integrating patient records/clinical information frequently

## INFORMATION TRANSFER FREQUENCY

	TOTAL HCP	Public Hospital	Private Hospital	GP Practice	Community Pharmacy	Specialist Practice Outside Hospitals	Allied Health Outside Hospitals	Residential Aged Care
<b>AVERAGE FREQUENCY PER DAY</b>								
Base (n)	2989	799	268	566	510	375	428	43
<b>Find/query</b> information from sources outside your organisation	7.2	6.2 ▼	7.0	8.8 ▲	8.7 ▲	8.9 ▲	3.9 ▼	7.2
<b>Send information</b> to other health service providers outside your organisation	6.9	4.9 ▼	6.7	9.7 ▲	6.6	11.4 ▲	3.5 ▼	6.3
<b>Receive information</b> from other health service providers outside your organisation	8.8	5.9 ▼	7.9	13.4 ▲	10.6 ▲	12.1 ▲	3.9 ▼	8.0
<b>Integrate the information</b> received from other health service providers into your clinical systems	8.2	5.3 ▼	7.7	12.3 ▲	8.7	12.4 ▲	4.2 ▼	8.3

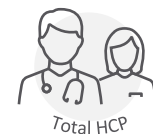
A1 When dealing with patient records/clinical information using any method (digital and non-digital), how frequently do you...?

Low base between 30 and 50

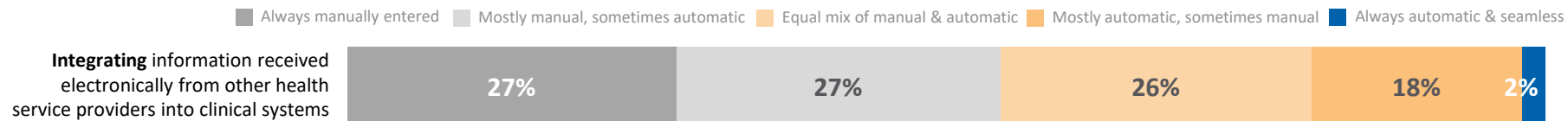
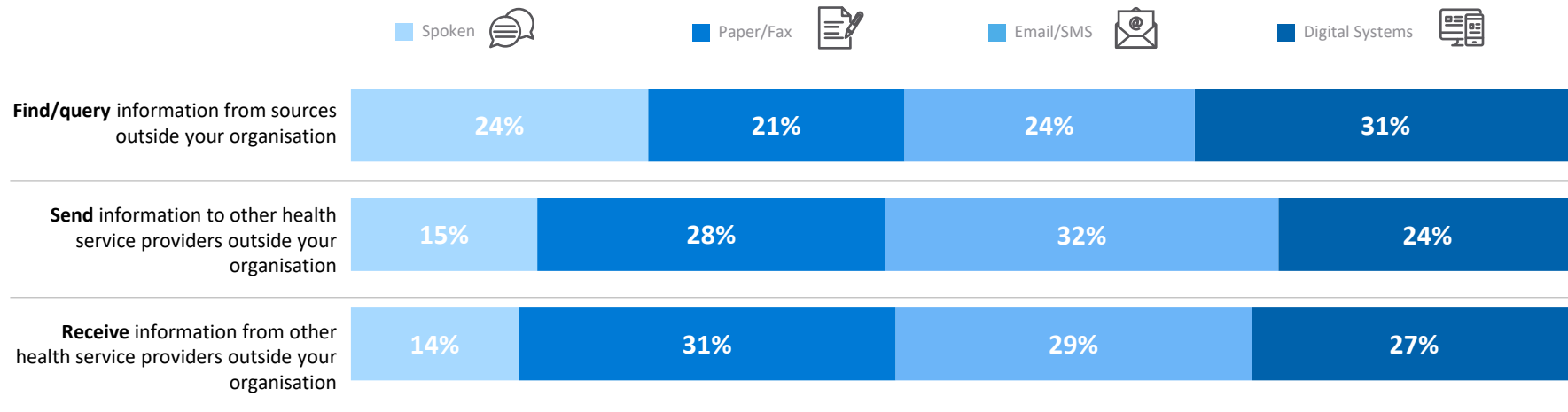
▲ ▼ Significantly higher/lower than other group at 95% confidence interval



# HCPS are currently using digital systems between 24% and 31% of the time for finding, sending and receiving patient records/clinical information; a fifth of HCPS claim that integration processes are always/mostly automatic



## METHODS FOR DEALING WITH PATIENTS RECORDS

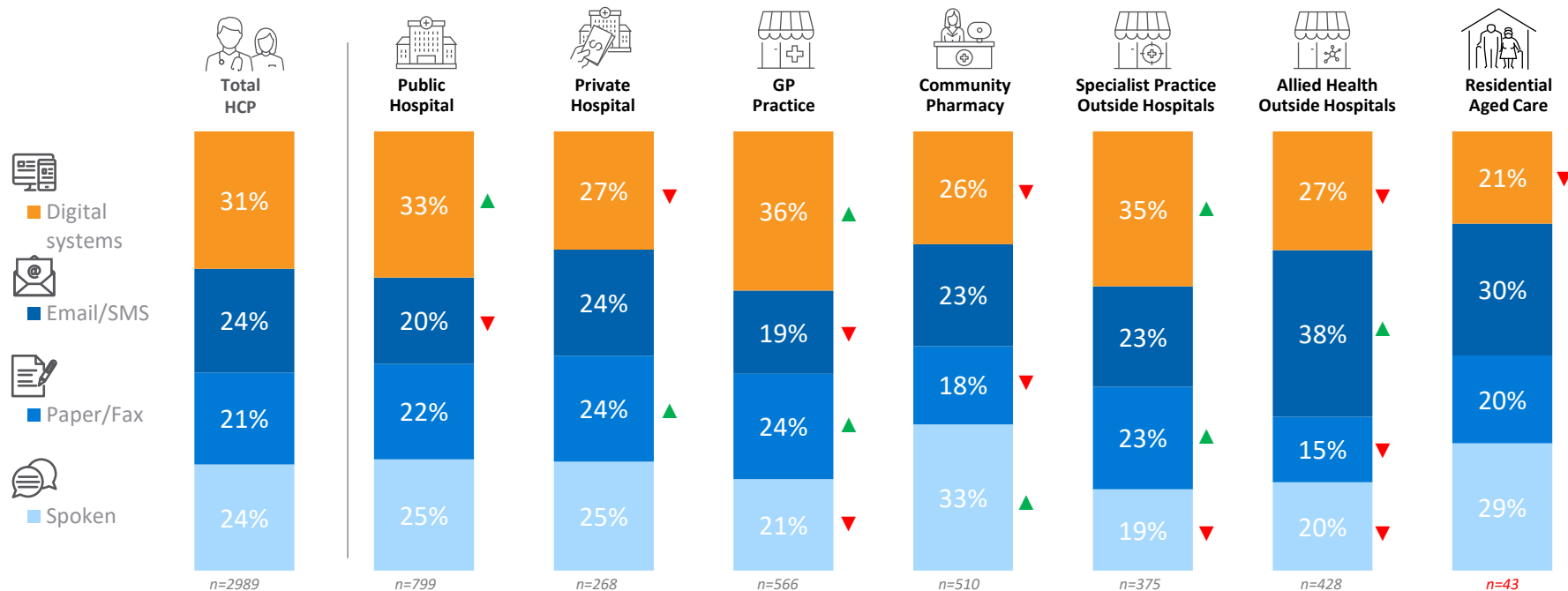


A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? Base: Total HCP Sample (n=2989)



# Public hospitals, GP practices and specialist practices are more engaged with digital systems when finding/querying information. Community pharmacies are more likely to speak to external sources

## FIND/QUERY INFORMATION FROM SOURCES OUTSIDE YOUR ORGANISATION BY SETTING



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? Find/query information from sources outside your organisation

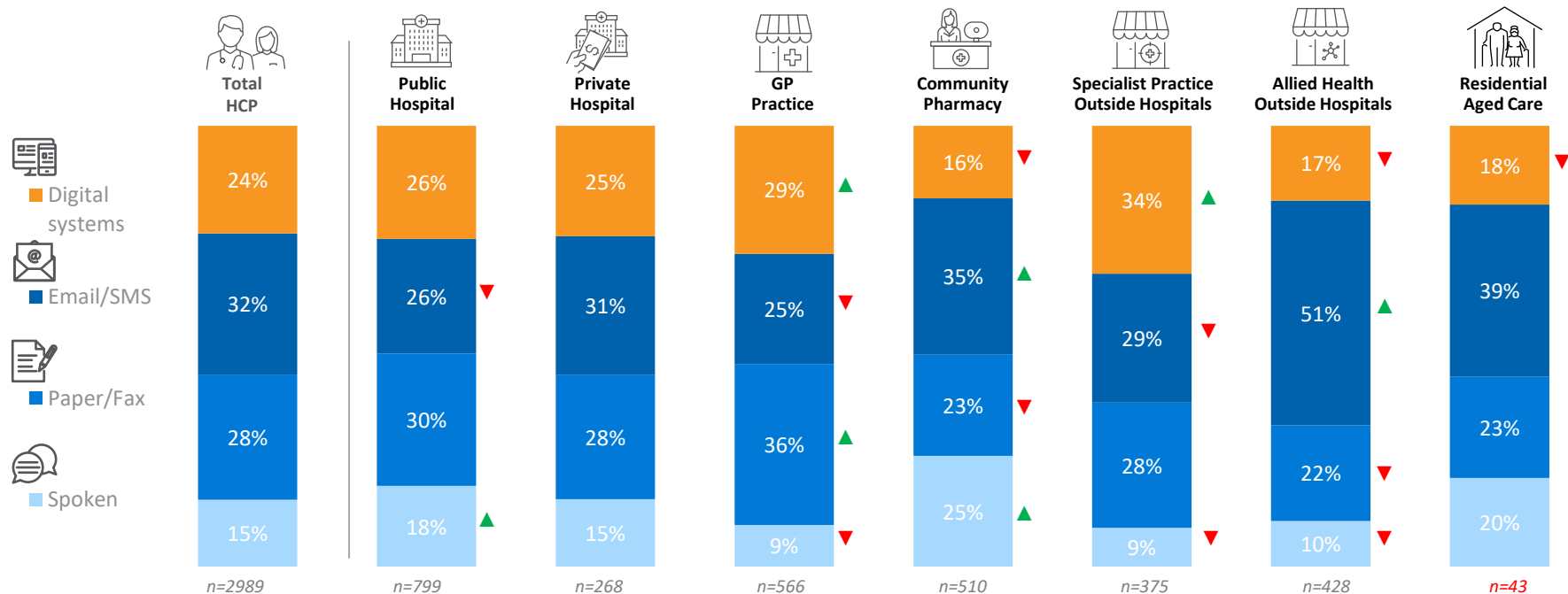
Low base between 30 and 50

▲ ▼ Significantly higher/lower than other group at 95% confidence interval



# GP practices are more likely to be using digital systems but are dependent on paper/ fax to send information; pharmacies are more likely to use email/SMS and phone, while allied health are dependent on email/SMS

SEND INFORMATION TO OTHER HEALTH SERVICE PROVIDERS OUTSIDE YOUR ORGANISATION BY SETTING



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? Send information to other health service providers outside your organisation

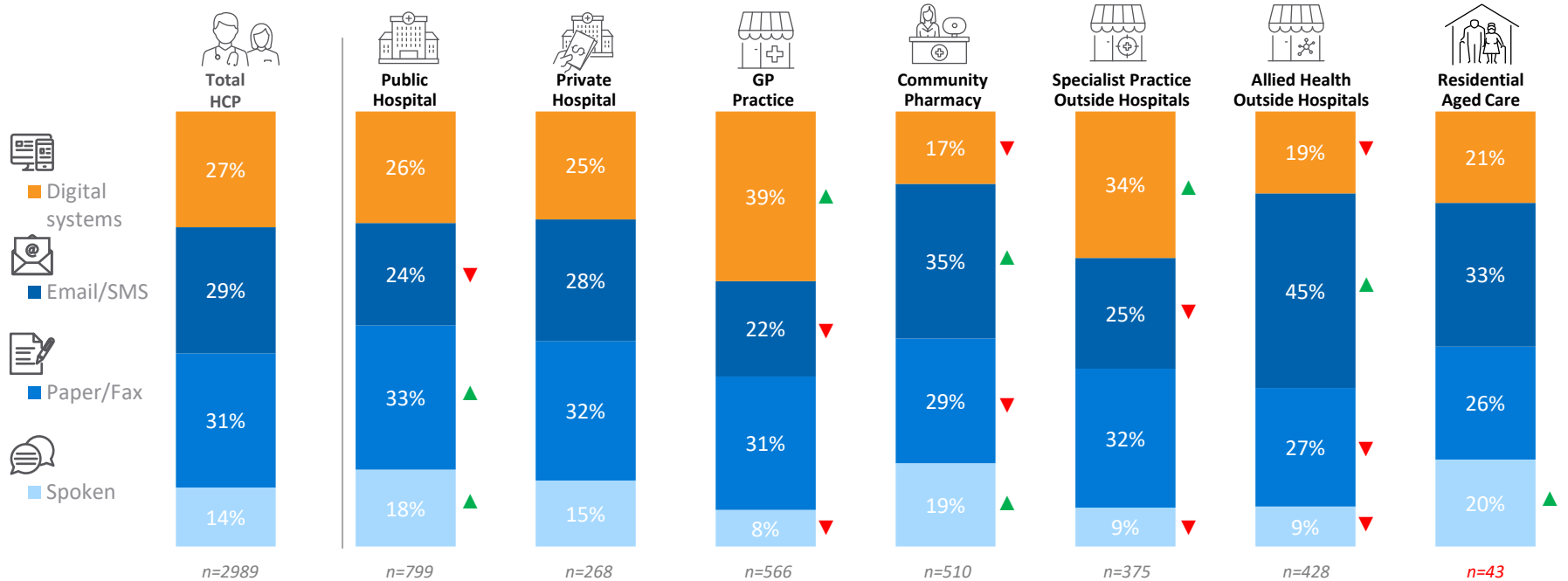
Low base between 30 and 50  
 ▲ Significantly higher, ▼ lower than other group at 95% confidence interval



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# GP and specialist practices have more interactions via digital systems when receiving information from other health service providers

RECEIVE INFORMATION FROM OTHER HEALTH SERVICE PROVIDERS OUTSIDE YOUR ORGANISATION BY SETTING



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? Receive information from other health service providers outside your organisation

Low base between 30 and 50  
 ▲ Significantly higher than other group at 95% confidence interval  
 ▼ Significantly lower than other group at 95% confidence interval

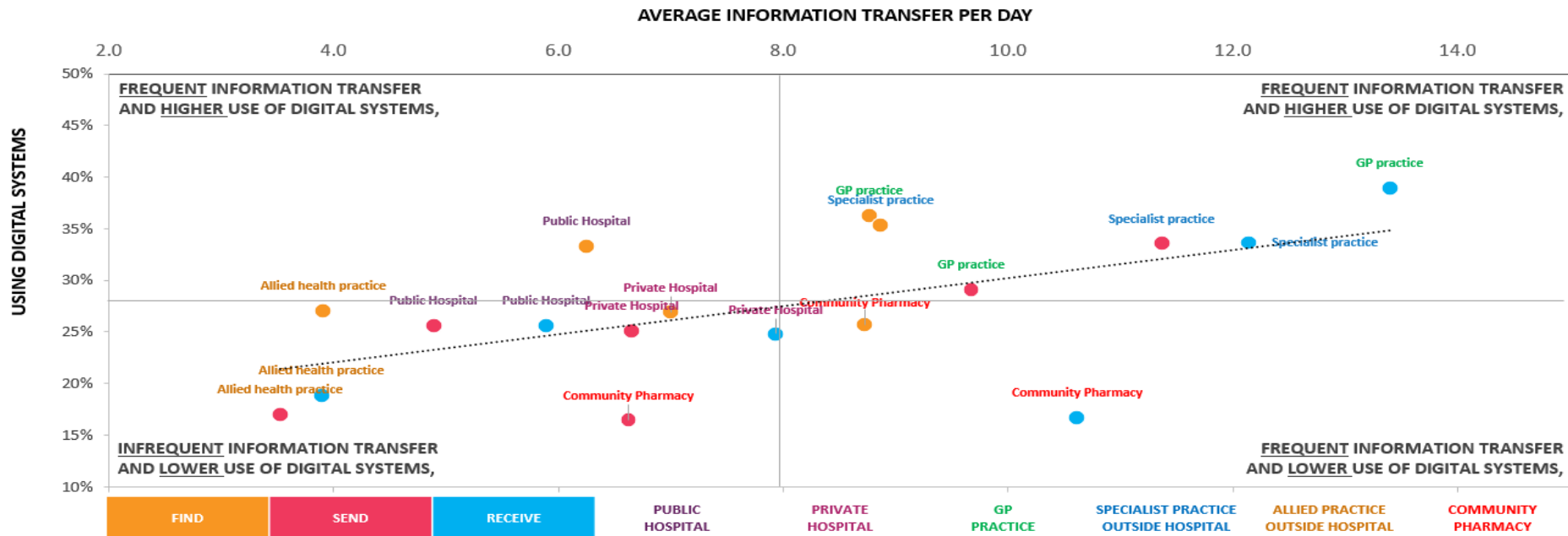




# There is a clear relationship between the frequency of information transfer and the use of digital systems to find, send and receive patient records/clinical information



## INFORMATION TRANSFER FREQUENCY X USE OF DIGITAL SYSTEMS



A1 When dealing with patient records/clinical information using any method (digital and non-digital), how frequently do you...?

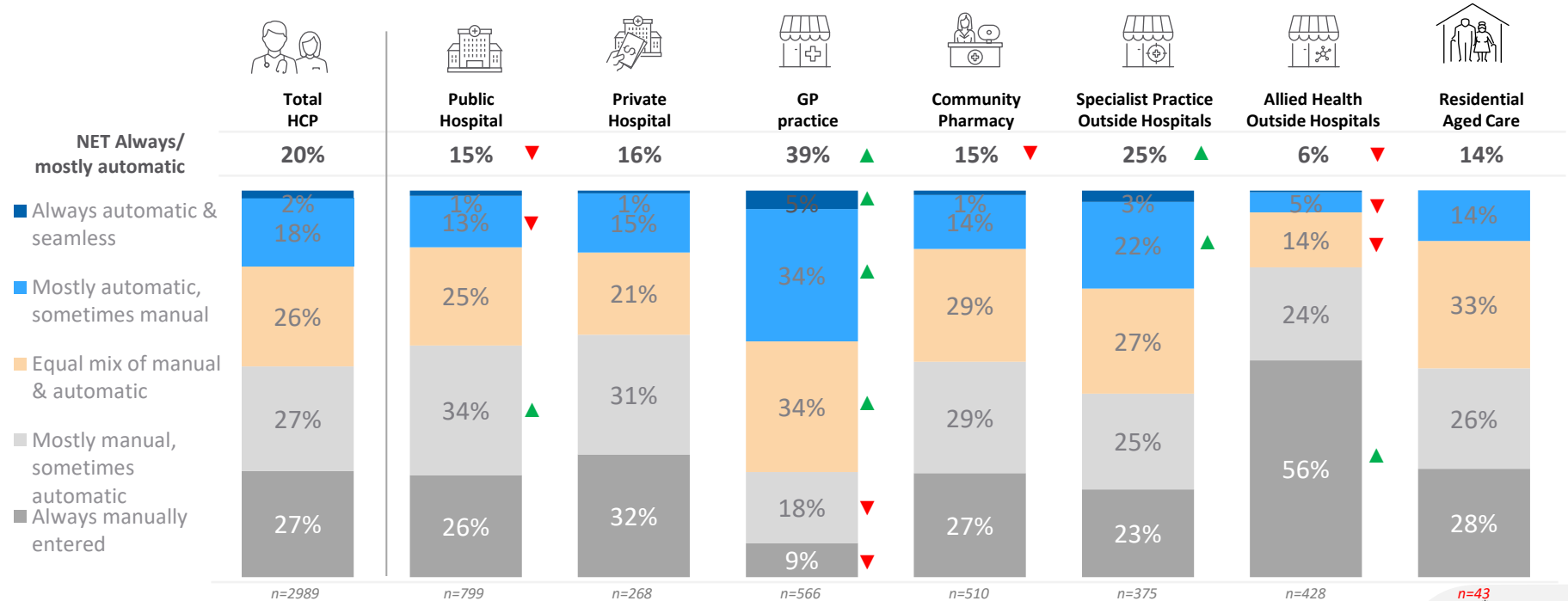
A2a When dealing with patient records/clinical information, how often do you use each of the following methods?

Base: public Hospital (n=799), Private Hospital (n=268), GP Practice (n=566), Community Pharmacy (n=510), Specialist Practice outside Hospitals (n=375), Allied Health outside Hospitals (n=428)



# When integrating patient records, GP and specialist practices are more likely to have automatic processes, while public hospitals and allied health are most dependent on manual methods

## INTEGRATING PATIENT RECORDS BY SETTING



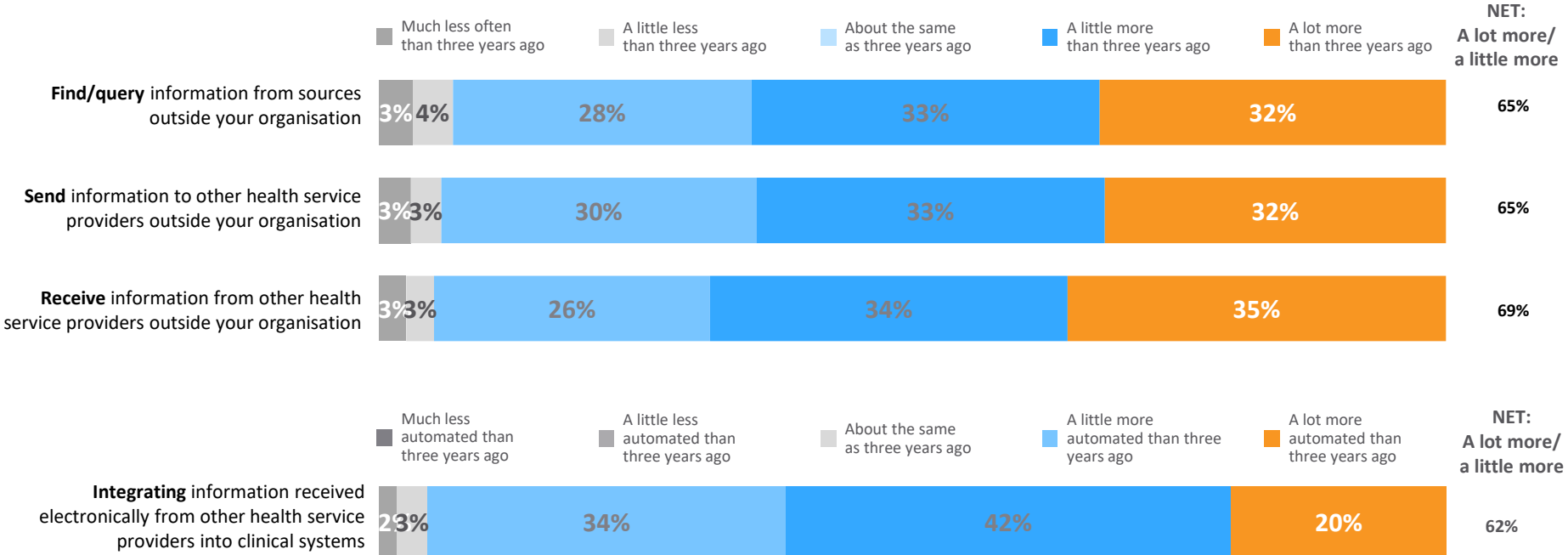
A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...?

Low base between 30 and 50  
 ▲ Significantly higher, ▼ Significantly lower than other group at 95% confidence interval.

# Two thirds of HCPs indicate that digital systems and automation are gaining momentum, while a third say they are using it at the same level to three years ago



## DIGITAL SYSTEMS AND AUTOMATION MOMENTUM

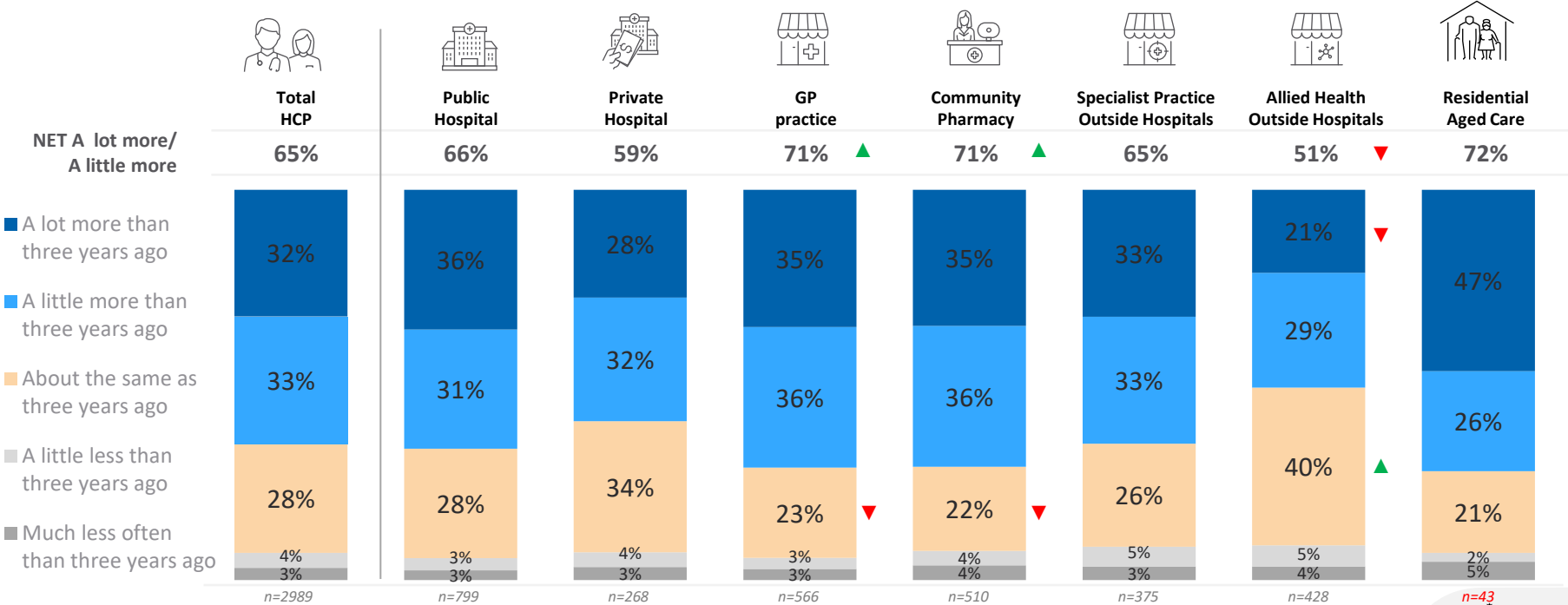


A3a When dealing with patient records/clinical information, would you say you are using digital systems to...?  
 When integrating information received from other health service providers into your clinical systems, would you say the process is...  
 Base Total HCP: (n=2989)



# Digital momentum is strongest for GP practices and community pharmacies when finding/querying Information from other health service providers

DIGITAL MOMENTUM - FINDING/QUERYING INFORMATION FROM SOURCES OUTSIDE BY SETTING

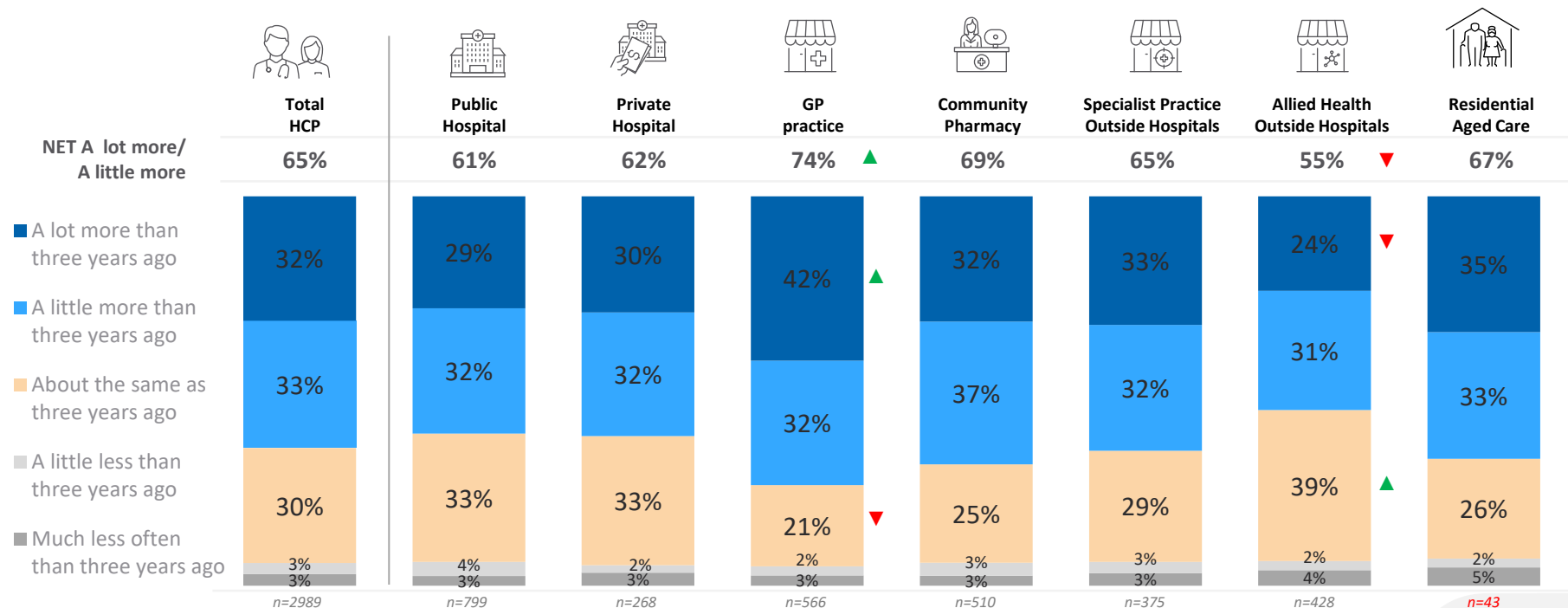


A3a When dealing with patient records/clinical information, would you say you are using Digital Systems to...?

Low base between 30 and 50  
 ▲ Significantly higher than other group at 95% confidence interval  
 ▼ Significantly lower than other group at 95% confidence interval

# Digital momentum is strongest for GP practices when sending information to other health service providers

DIGITAL MOMENTUM - SEND INFORMATION TO OTHER HEALTHCARE PROVIDERS BY SETTING



Low base between 30 and 50

▲ Significantly higher, ▼ Significantly lower than other group at 95% confidence interval

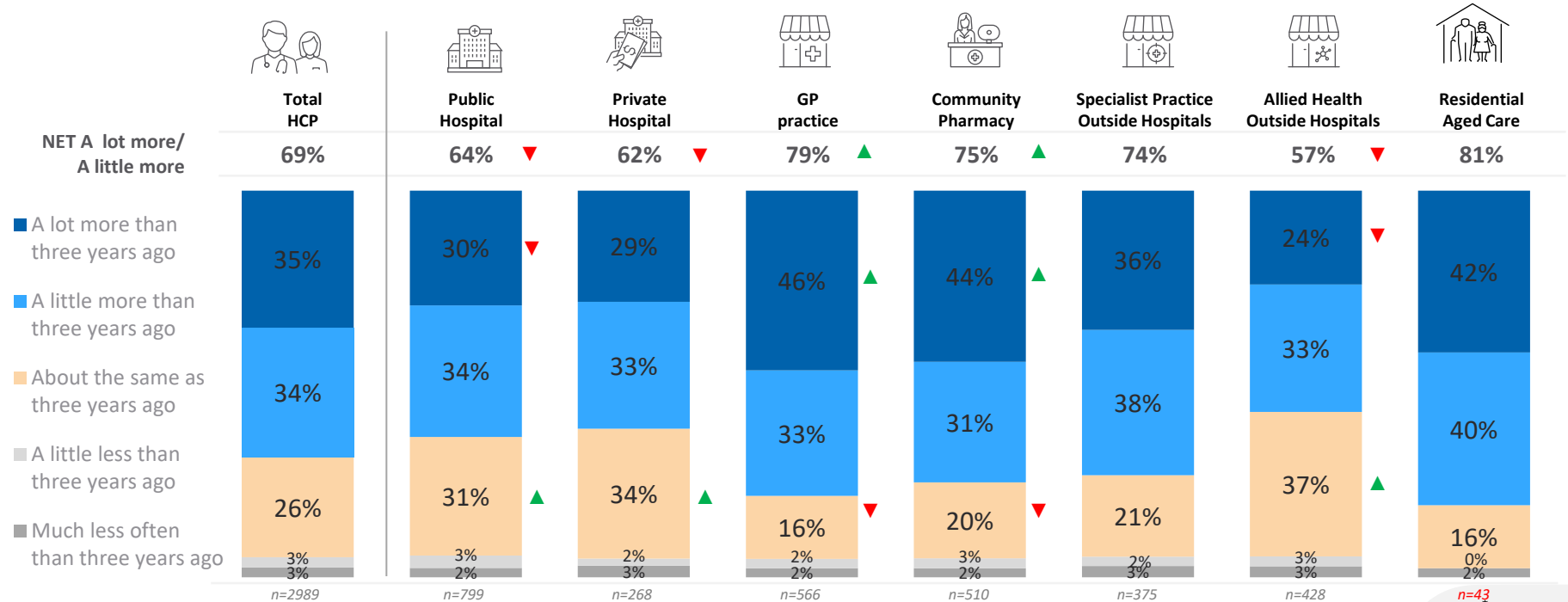
A3a When dealing with patient records/clinical information, would you say you are using Digital Systems to...?



Australian Government  
Australian Digital Health Agency

# Digital momentum is strongest for GP practices and community pharmacies when receiving information to other health service providers

DIGITAL MOMENTUM - RECEIVE INFORMATION FROM OTHER HEALTH SERVICE PROVIDERS BY SETTING



A3a When dealing with patient records/clinical information, would you say you are using Digital Systems to...?

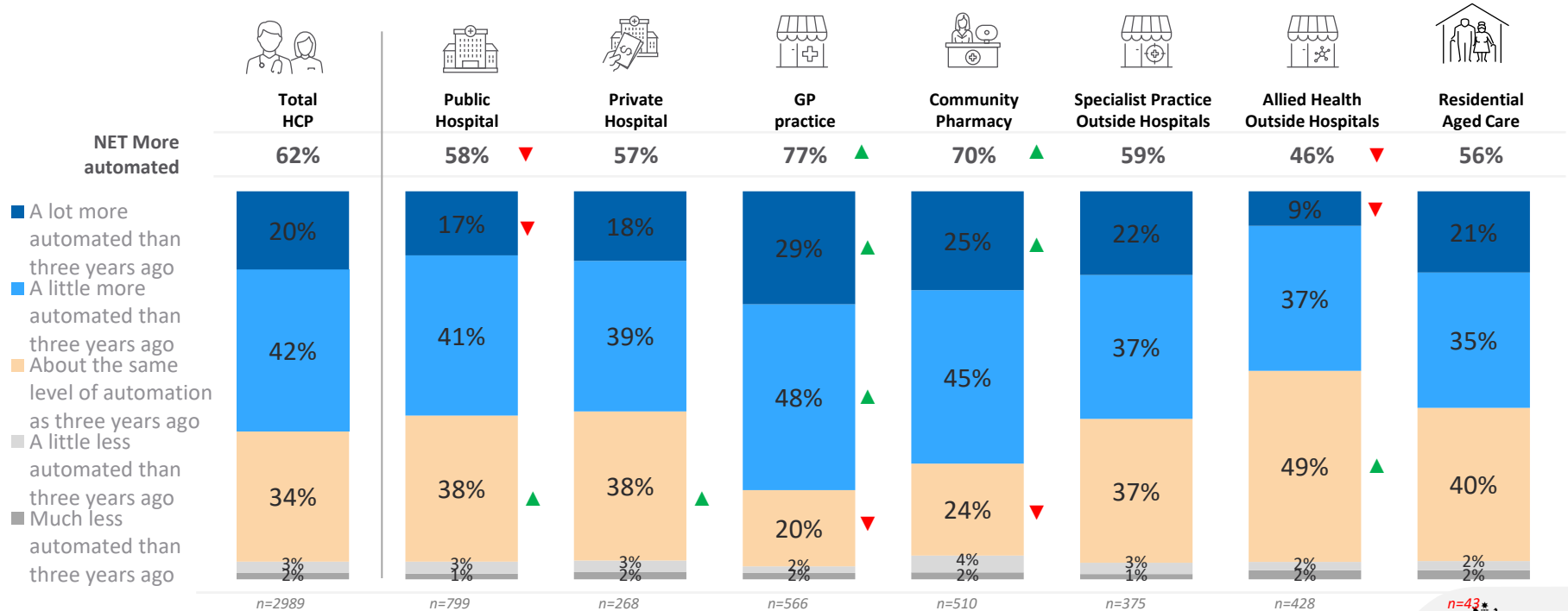
▲ Significantly higher than other group at 95% confidence interval  
▼ Significantly lower than other group at 95% confidence interval  
Low base between 30 and 50



Australian Government  
Australian Digital Health Agency

# Automation momentum is strongest for GP practices and community pharmacies when integrating information from other health service providers

## INTEGRATE INFORMATION FROM OTHER HEALTHCARE PROVIDERS BY SETTING



A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...







Low base between 30 and 50  
 ▲ Significantly higher than other group at 95% confidence interval  
 ▼ Significantly lower than other group at 95% confidence interval



# HCPs working in WA in a public and private hospital setting are more likely to say that the use of digital systems and automation when integrating is about the same as three years ago

## DIGITAL SYSTEMS/AUTOMATION MOMENTUM X STATE AND SETTING

### ABOUT THE SAME AS THREE YEARS AGO

	 <b>Public Hospital</b>					 <b>Private Hospital</b>					 <b>GP practice</b>					 <b>Community Pharmacy</b>				 <b>Specialist practice outside hospitals</b>			 <b>Allied health outside hospitals</b>		
	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	NSW	VIC	QLD	
<b>FIND USING DIGITAL SYSTEMS</b>	25%	30%	25%	40%	33%	36%	35%	21%	50%	27%	21%	21%	25%	23%	18%	26%	22%	24%	26%	26%	30%	38%	45%	47%	
<b>SEND USING DIGITAL SYSTEMS</b>	34%	32%	30%	45%	36%	36%	38%	21%	37%	23%	24%	17%	16%	29%	20%	30%	29%	24%	29%	25%	36%	37%	39%	40%	
<b>RECEIVE USING DIGITAL SYSTEMS</b>	29%	33%	31%	40%	28%	38%	34%	21%	43%	18%	18%	13%	16%	14%	18%	23%	19%	18%	24%	16%	28%	37%	37%	40%	
<b>INTEGRATE AUTOMATION</b>	35%	38%	40%	53%	30%	35%	44%	28%	50%	22%	18%	17%	15%	26%	20%	27%	27%	31%	39%	35%	39%	52%	48%	44%	
<b>Base (n)</b>	269	246	135	53	69	84	82	53	30	184	148	115	67	35	189	134	98	45	136	117	74	186	122	73	

A3a. When dealing with patient records/clinical information, would you say you are using digital systems to...?  
A3b. When integrating information received from other health service providers into your clinical systems, would you say the process is...

NOTE: Base <30 too low to report SA, TAS, NT, ACT (<50) (public hospital SA base included). WA, allied health and specialist practice

**Low base between 30 and 50**  
Significantly higher/lower than other group at 95% confidence interval.





# Those seeing less patients are more likely to be using digital systems and automation to integrate information about the same as three years ago

## DIGITAL SYSTEMS/AUTOMATION MOMENTUM X STATE AND SETTING

ABOUT THE SAME AS THREE YEARS AGO

### NUMBER OF PATIENTS SEEN PER WEEK

	1-20	20-40	40-80	80-200	200+
<b><u>FIND</u> USING DIGITAL SYSTEMS</b>	38% ▲	32% ▲	29%	26%	22% ▼
<b><u>SEND</u> USING DIGITAL SYSTEMS</b>	42% ▲	34% ▲	30%	25% ▼	24% ▼
<b><u>RECEIVE</u> USING DIGITAL SYSTEMS</b>	39% ▲	30% ▲	29% ▲	20% ▼	17% ▼
<b><u>INTEGRATE</u> AUTOMATION</b>	45% ▲	40% ▲	38% ▲	28% ▼	24% ▼
<i>Base (n)</i>	298	512	725	658	617

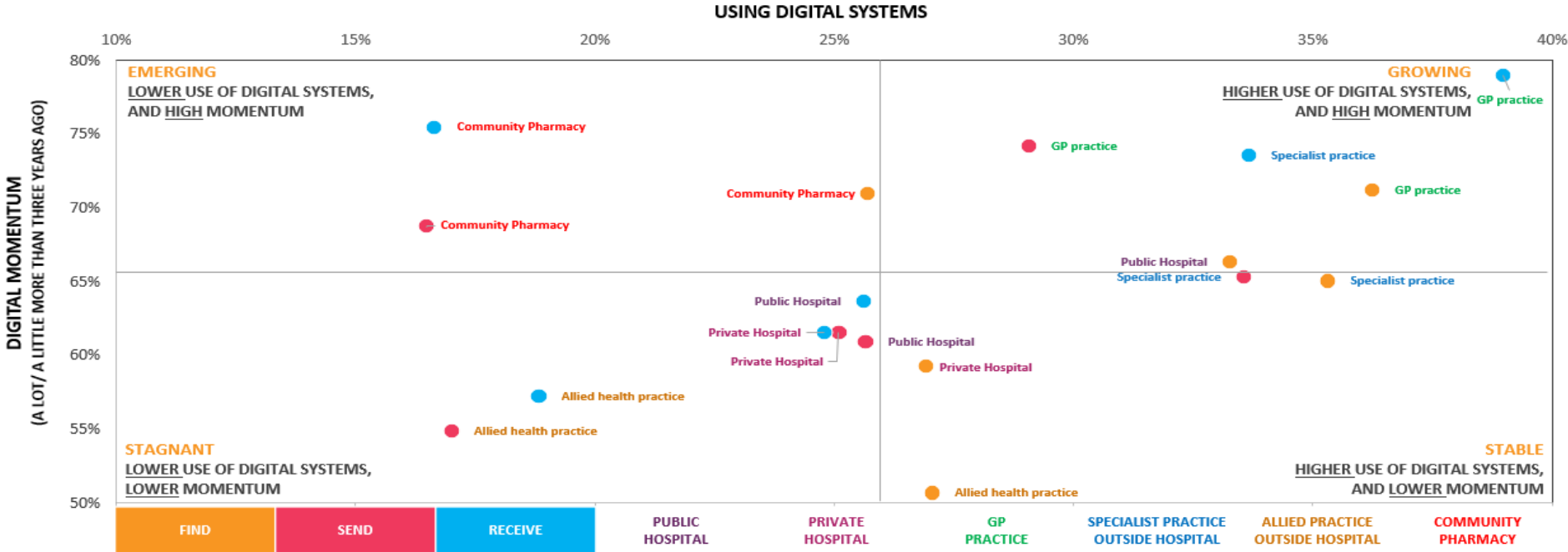
A3a When dealing with patient records/clinical information, would you say you are using digital systems to...?  
 A3b. When integrating information received from other health service providers into your clinical systems, would you say the process is...

▲ ▼ Significantly higher/lower than other group at 95% confidence interval



# Digital systems are gaining most momentum among HCPs working in community pharmacies, GP and specialist practices, while hospitals and allied health practices are transitioning more slowly

USE OF DIGITAL SYSTEMS (FIND/QUERY, SEND, RECEIVE) X DIGITAL MOMENTUM

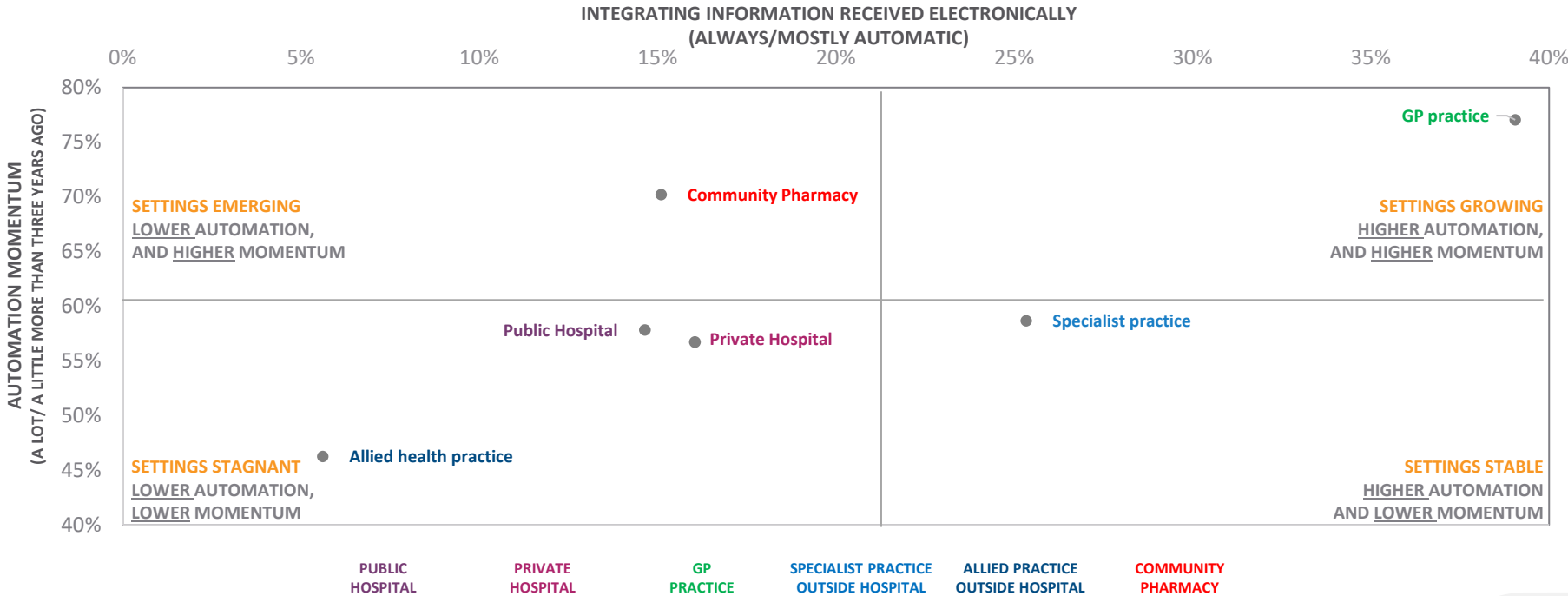


A2a When dealing with patient records/clinical information, how often do you use each of the following methods?  
 A3a When dealing with patient records/clinical information, would you say you are using digital systems to...?  
 Base: public Hospital (n=799), Private Hospital (n=268), GP Practice (n=566), Community Pharmacy (n=510), Specialist Practice outside Hospitals (n=375), Allied Health outside Hospitals (n=428)



# When integrating patient/clinical information, community pharmacies and GP practices are charging ahead of other settings on automation

USE OF DIGITAL SYSTEMS (INTEGRATE) X DIGITAL MOMENTUM



A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...?  
 A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...?  
 Base: Public Hospital (n=799), Private Hospital (n=268), GP Practice (n=566), Community Pharmacy (n=510), Specialist Practice outside Hospitals (n=375), Allied Health outside Hospitals (n=428)

# Across most settings, HCPs residing in QLD are significantly more likely to be using digital systems when dealing with patient information

## METHODS FOR DEALING WITH PATIENT RECORDS/CLINICAL INFORMATION X STATE AND SETTING

	Public Hospital					Private Hospital					GP Practice					Community Pharmacy				Specialist Practice Outside Hospitals			Allied Health Outside Hospitals		
	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	NSW	VIC	QLD	
<b>FIND USING DIGITAL SYSTEMS</b>	30%	29%	43% ▲	28%	40%	23%	22%	42% ▲	26%	32%	35%	44% ▲	38%	27%	24%	26%	28%	26%	31%	34%	46% ▲	27%	24%	31%	
<b>SEND USING DIGITAL SYSTEMS</b>	22%	24%	33% ▲	26%	22%	20%	23%	37% ▲	31%	23% ▼	25%	43% ▲	32%	20% ▼	17%	13%	17%	23%	29%	29%	47% ▲	18%	13%	19%	
<b>RECEIVE USING DIGITAL SYSTEMS</b>	23%	23%	33% ▲	25%	22%	22%	23%	34%	26%	36%	36%	47%	42%	36%	16%	14%	20%	23%	29% ▼	30%	47% ▲	20%	15%	22%	
<b>INTEGRATE ALWAYS/MOSTLY AUTOMATIC</b>	13%	14%	18%	13%	16%	12%	17%	25%	17%	39%	39%	44%	34%	34%	15%	12%	16%	16%	21%	24%	34%	4%	11%	1%	
<i>Base (n)</i>	269	246	135	53	69	84	82	53	30	184	148	115	67	35	189	134	98	45	136	117	74	186	122	73	

A2a When dealing with patient records/clinical information, how often do you use each of the following methods?  
A2b. When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...?







NOTE: Base <30 too low to report including; SA for private hospital, community pharmacy, specialist and allied health practices, and WA for specialist and allied health practice

Low base between 30 and 50  
▲ ▼ Significantly higher/lower than other group at 95% confidence interval



# Use of digital systems is largely consistent by region across setting; those in specialist practices are more likely to be using digital systems in metro areas for sending information than regional/remote

## USE OF DIGITAL SYSTEMS BY SETTING X REGION

	 Public Hospital		 Private Hospital		 GP Practice		 Community Pharmacy		 Specialist Practice Outside Hospitals		 Allied Health Outside Hospitals	
	Metro	Regional/Remote	Metro	Regional/Remote	Metro	Regional/Remote	Metro	Regional/Remote	Metro	Regional/Remote	Metro	Regional/Remote
<b>FIND</b>	33%	36%	27%	28%	36%	36%	26%	24%	36%	30%	28%	23%
<b>SEND</b>	25%	27%	25%	25%	29%	31%	17%	16%	35% ▲	23% ▼	17%	16%
<b>RECEIVE</b>	25%	27%	25%	22%	38%	42%	17%	17%	35%	26%	19%	17%
<i>Base (n)</i>	685	114	244	24	475	91	423	87	336	39	344	84

Low base between 20 and 50

A2a When dealing with patient records/clinical information, how often do you use each of the following methods?







▲ Significantly higher, ▼ Significantly lower than other group at 95% confidence interval



# Digital momentum is largely consistent across states within settings, however digital momentum is higher in QLD in private hospitals

## DIGITAL SYSTEMS/AUTOMATION MOMENTUM X STATE AND SETTING

A LOT MORE / A LITTLE MORE THAN THREE YEARS AGO

	 Public Hospital					 Private Hospital				 GP practice					 Community Pharmacy				 Specialist practice outside hospitals			 Allied health outside hospitals		
	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	WA	SA	NSW	VIC	QLD	WA	NSW	VIC	QLD	NSW	VIC	QLD
<b>FIND USING DIGITAL SYSTEMS</b>	70%	64%	69%	55%	61%	56%	62%	74%	33% ▼	68%	70%	75%	72%	66%	72%	65%	77%	64%	63%	68%	62%	55%	47%	42%
<b>SEND USING DIGITAL SYSTEMS</b>	61%	61%	62%	49%	58%	60%	56%	77%	57% ▲	73%	70%	79%	79%	63%	73%	60%	70%	69%	63%	71%	58%	58%	53%	53%
<b>RECEIVE USING DIGITAL SYSTEMS</b>	67%	62%	64%	55%	62%	56%	61%	79%	50% ▲	78%	75%	85%	79%	74%	76%	70%	80%	76%	71%	79%	66%	57%	57%	58%
<b>INTEGRATE AUTOMATION</b>	59%	58%	58%	43%	64%	58%	51%	66%	50% ▲	74%	78%	80%	81%	69%	74%	65%	71%	67%	54%	62%	58%	44%	48%	51%
<i>Base (n)</i>	269	246	135	53	69	84	82	53	30	184	148	115	67	35	189	134	98	45	136	117	74	186	122	73

A3a. When dealing with patient records/clinical information, would you say you are using digital systems to...?

A3b. When integrating information received from other health service providers into your clinical systems, would you say the process is...

NOTE: Base <30 too low to report SA, TAS, NT, ACT (<50) (public hospital SA base included). WA, allied health and specialist practice

Low base between 30 and 50  
 ▲ significantly higher than other group at 95% confidence interval  
 ▼ significantly lower than other group at 95% confidence interval





# Section 5:

## Digital maturity by setting

# Digital maturity summary: public hospital

## Current use of digital and momentum is in line with the average HCP



### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems

**Find/query** information from sources outside your organisation



**Send** information to other health service providers outside your organisation



**Receive** information from other health service providers outside your organisation



#### MOMENTUM



- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless

**Integrating** information received electronically from other health service providers into clinical systems



#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...? Base: Public hospital (n=799)





# Digital maturity summary: private hospitals

## Current use of digital and momentum is slightly lower than average



### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



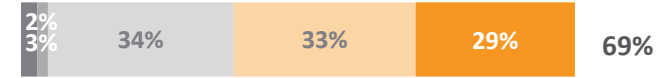
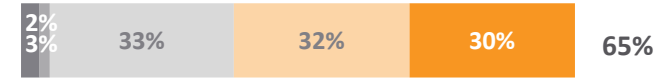
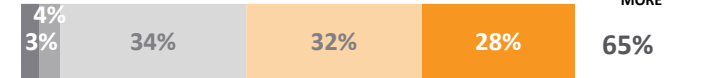
- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems



#### MOMENTUM



- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago



#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless



#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...?  
Base: Private hospital (n=268)



# Digital maturity summary: GP practices

## More digitally mature than the average and have strong momentum



### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems

TOTAL HCP:  
DIGITAL SYSTEMS

**Find/query** information from sources outside your organisation



**Send** information to other health service providers outside your organisation



**Receive** information from other health service providers outside your organisation

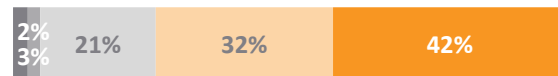
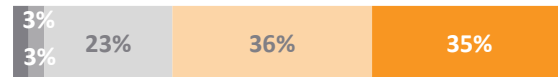


#### MOMENTUM



- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago

TOTAL HCP:  
MUCH MORE/  
A LITTLE MORE



#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless

TOTAL HCP:  
MOSTLY/SOMEWHAT AUTOMATIC

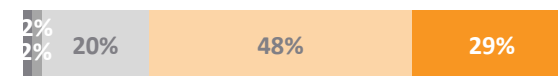
**Integrating** information received electronically from other health service providers into clinical systems



#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago

TOTAL HCP:  
MUCH MORE/  
A LITTLE MORE



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...? Base: GP Practice (n=566)



# Digital maturity summary: community pharmacies

## Less digital mature but have strong momentum



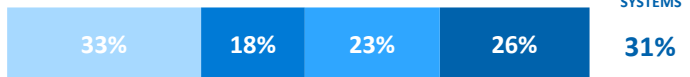
### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems

**Find/query** information from sources outside your organisation



**Send** information to other health service providers outside your organisation



**Receive** information from other health service providers outside your organisation

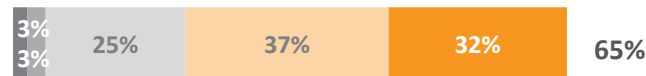
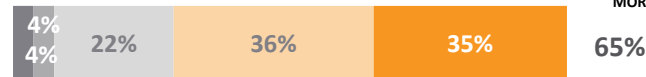


#### MOMENTUM



- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless

**TOTAL HCP: MOSTLY/SOMEWHAT AUTOMATIC**

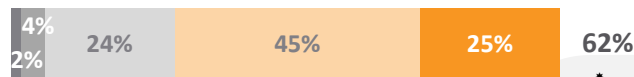
**Integrating** information received electronically from other health service providers into clinical systems



#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...? Base: Community Pharmacy (n=510)



# Digital maturity summary: specialist practices outside hospitals

## Specialists sit above average on digital maturity and momentum is average



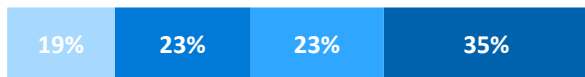
### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems

**Find/query** information from sources outside your organisation



TOTAL HCP: DIGITAL SYSTEMS 31%

**Send** information to other health service providers outside your organisation



24%

**Receive** information from other health service providers outside your organisation

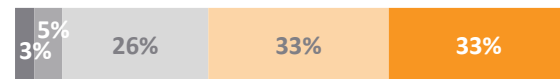


27%

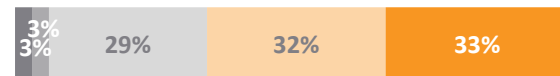
#### MOMENTUM



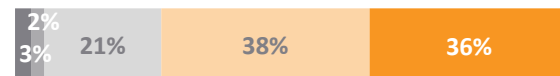
- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago



TOTAL HCP: MUCH MORE/ A LITTLE MORE 65%



65%



69%

#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless

**Integrating** information received electronically from other health service providers into clinical systems



TOTAL HCP: MOSTLY/SOMEWHAT AUTOMATIC 20%

#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago



TOTAL HCP: MUCH MORE/ A LITTLE MORE 62%

A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...? Base: Specialist Practice (n=375)



# Digital maturity summary: allied health practices outside hospitals

## Allied digital maturity is low and momentum is slower than other settings



### DEALING WITH PATIENTS RECORDS/CLINICAL INFORMATION

#### CURRENT METHODS



- Spoken
- Paper/Fax
- Email/SMS
- Digital Systems

**Find/query** information from sources outside your organisation



**TOTAL HCP: DIGITAL SYSTEMS**

31%

**Send** information to other health service providers outside your organisation



24%

**Receive** information from other health service providers outside your organisation



27%

#### MOMENTUM



- Much less often than 3 years ago
- A little less often than 3 years ago
- About the same
- A little more often
- Much more often than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



65%



65%



69%

#### CURRENT AUTOMATION

- Always manually entered
- Mostly manual, sometimes automatic
- Equal mix of manual & automatic
- Mostly automatic, sometimes manual
- Always automatic & seamless

**Integrating** information received electronically from other health service providers into clinical systems



**TOTAL HCP: MOSTLY/SOMEWHAT AUTOMATIC**

20%

#### MOMENTUM

- Much less automated than 3 years ago
- A little less automated than 3 years ago
- About the same
- A little more automated than 3 years ago
- Much more automated than 3 years ago

**TOTAL HCP: MUCH MORE/ A LITTLE MORE**



62%



A2a When dealing with patient records/clinical information, how often do you use each of the following methods? A2b When integrating patient records/clinical information received electronically from other health service providers into your clinical systems, is the process...? A3a When dealing with patient records/clinical information, would you say you are using digital systems to...? A3b When integrating information received from other health service providers into your clinical systems, would you say the process is...? Base: Allied Health (n=428)



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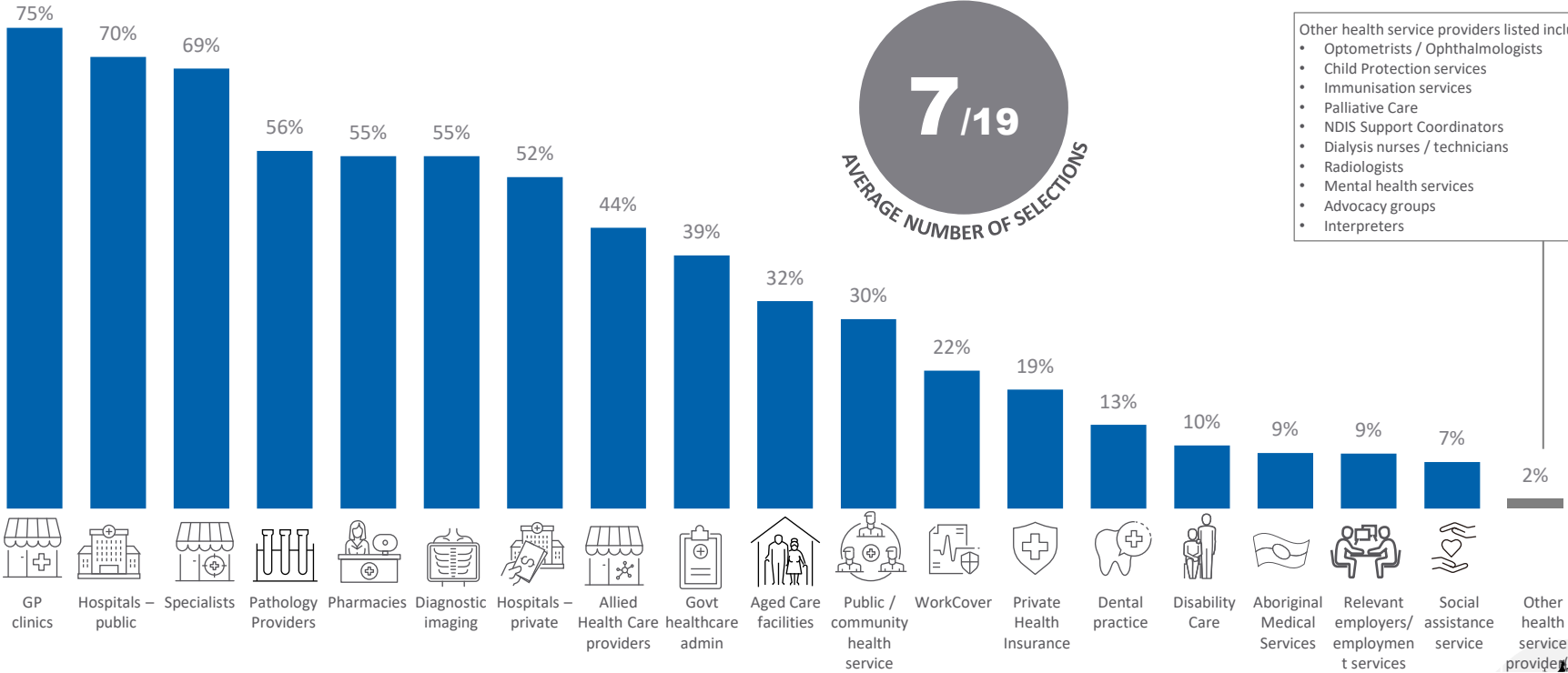
## Section 6:

# Healthcare provider interactions

# GP clinics are the most commonly interacted with, closely followed by public hospitals and specialists



PROPORTION OF HCPs WHO INTERACT WITH EACH HEALTH SERVICE PROVIDER REGULARLY (TOTAL HCPs)










B1 Which of the following health service providers do you regularly interact with regarding patient records/clinical information?  
Base: Total HCP Sample (n=2,989)

# GP practices have the highest number of interactions with other health service providers



## INTERACTIONS WITH HEALTH SERVICE PROVIDERS BY SETTING

	 TOTAL HCP	 Public Hospital	 Private Hospital	 GP practice	 Community Pharmacy	 Specialist Practice Outside Hospitals	 Allied Health Outside Hospitals	
	Base (n)	2,989	799	268	566	510	375	428
<b>Average no. service providers interacted with</b>	<b>6.7</b>	<b>6.5</b> ▼	<b>6.2</b> ▼	<b>8.7</b> ▲	<b>6.2</b> ▼	<b>6.6</b>	<b>4.9</b> ▼	
GP clinics	75%	74%	60%	56%	93%	86%	80%	
Hospitals – public	70%	83%	63%	84%	81%	59%	30%	
Specialists	69%	66%	71%	87%	50%	79%	62%	
Pathology Providers	56%	67%	72%	87%	7%	81%	17%	
Pharmacies	55%	51%	46%	69%	88%	46%	14%	
Diagnostic imaging	55%	64%	64%	85%	2%	72%	40%	
Hospitals – private	52%	50%	68%	63%	63%	51%	16%	
Allied Health Care providers	44%	38%	32%	74%	25%	29%	53%	
Government healthcare administration	39%	24%	28%	55%	50%	46%	35%	
Aged Care facilities	32%	36%	21%	36%	54%	14%	15%	
Public / community health service	30%	34%	20%	39%	25%	25%	22%	
WorkCover	22%	6%	17%	55%	17%	15%	20%	
Private Health Insurance	19%	9%	37%	16%	7%	31%	33%	
Dental practice	13%	5%	4%	11%	32%	6%	18%	
Disability Care	10%	9%	3%	17%	8%	5%	12%	
Aboriginal Medical Services	9%	14%	2%	8%	9%	9%	4%	
Relevant employers / employment services	9%	6%	8%	19%	5%	4%	8%	
Social assistance service	7%	8%	5%	11%	5%	6%	5%	
Other health service provider(s)	2%	2%	1%	1%	1%	2%	3%	

B1 Which of the following health service providers do you interact with regarding patient records/clinical information?






▲ ▼ Significantly higher/lower than other group at 95% confidence interval





# Nurses/midwives and GPs interact with the largest number of health service providers

## INTERACTIONS WITH HEALTH SERVICE PROVIDERS BY PROFESSION

	 Pharmacist	 Nurse / Mid-wife	 GP	 Allied health	 Medical Specialist
<b>Average no. service providers interacted with</b>	6.1 ▼	7.1 ▲	9.0 ▲	4.8 ▼	6.7
GP clinics	90% ▲	64% ▼	52% ▼	75%	83% ▲
Hospitals – public	80% ▲	76% ▲	90% ▲	33% ▼	72%
Specialists	49% ▼	64% ▼	92% ▲	59% ▼	81% ▲
Pathology Providers	11% ▼	72% ▲	91% ▲	19% ▼	82% ▲
Pharmacies	89% ▲	56%	71% ▲	14% ▼	46% ▼
Diagnostic imaging	4% ▼	62% ▲	91% ▲	40% ▼	78% ▲
Hospitals – private	62% ▲	52%	68% ▲	19% ▼	55%
Allied Health Care providers	24% ▼	57% ▲	76% ▲	52% ▲	26% ▼
Government healthcare administration	49% ▲	31% ▼	50% ▲	33% ▼	37%
Aged Care facilities	54% ▲	38% ▲	36%	18% ▼	19% ▼
Public / community health service	25% ▼	48% ▲	36% ▲	21% ▼	20% ▼
WorkCover	16% ▼	12% ▼	64% ▲	18%	13% ▼
Private Health Insurance	7% ▼	15% ▼	17%	31% ▲	23% ▲
Dental practice	27% ▲	7% ▼	9% ▼	18% ▲	5% ▼
Disability Care	7% ▼	15% ▲	16% ▲	11%	4% ▼
Aboriginal Medical Services	9%	14% ▲	8%	3% ▼	9%
Relevant employers / employment services	4% ▼	11% ▲	21% ▲	6% ▼	5% ▼
Social assistance service	4% ▼	13% ▲	11% ▲	4% ▼	5% ▼
Other health service	0%	2%	1%	3%	2%
<b>Base (n)</b>	611	585	426	517	806

B1 Which of the following health service providers do you interact with regarding patient records/clinical information?

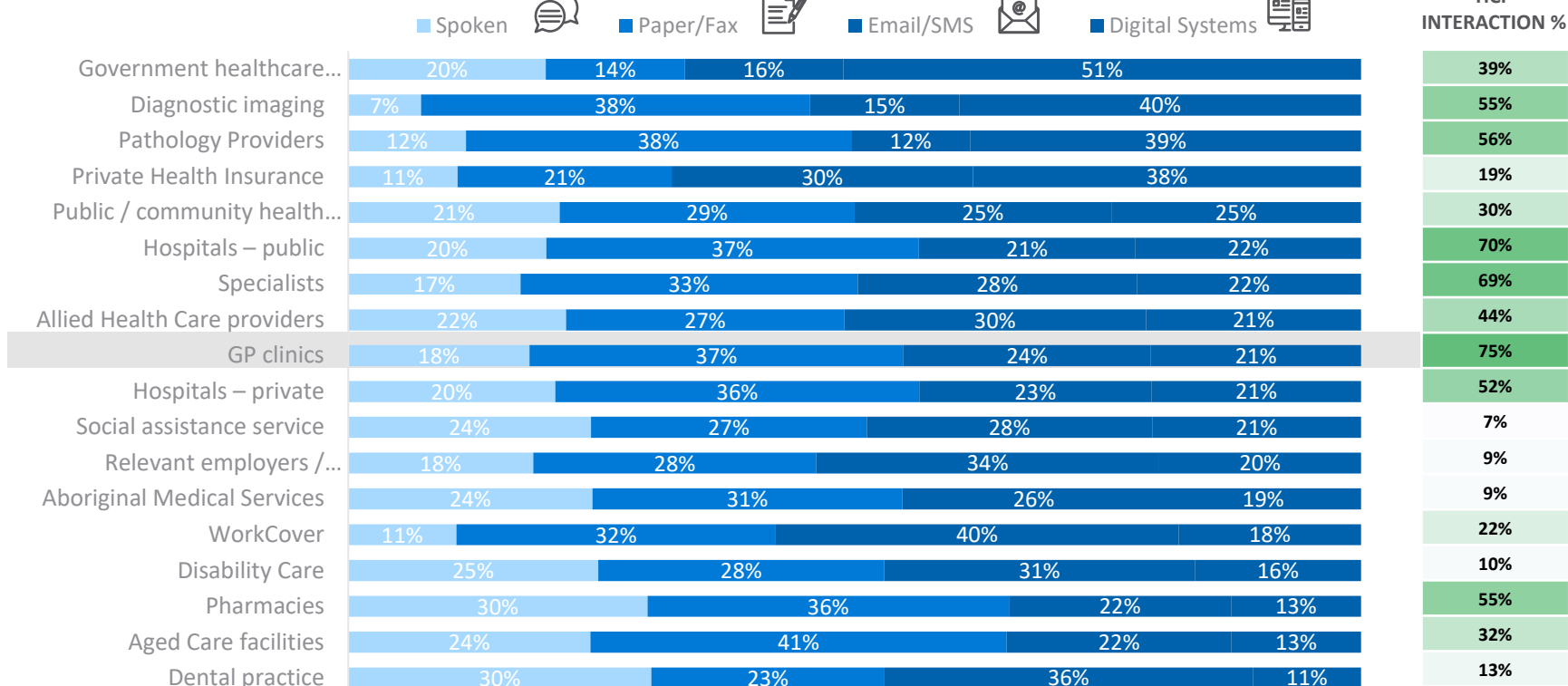
▲ ▼ Significantly higher lower than other group at 95% confidence interval



# Digital systems are paramount for sending patient records to government healthcare administration; GP clinics have the most interaction but still reliant on paper/fax



METHODS OF SENDING PATIENT RECORDS BY HEALTH SERVICE PROVIDER BY SERVICE PROVIDER TYPE



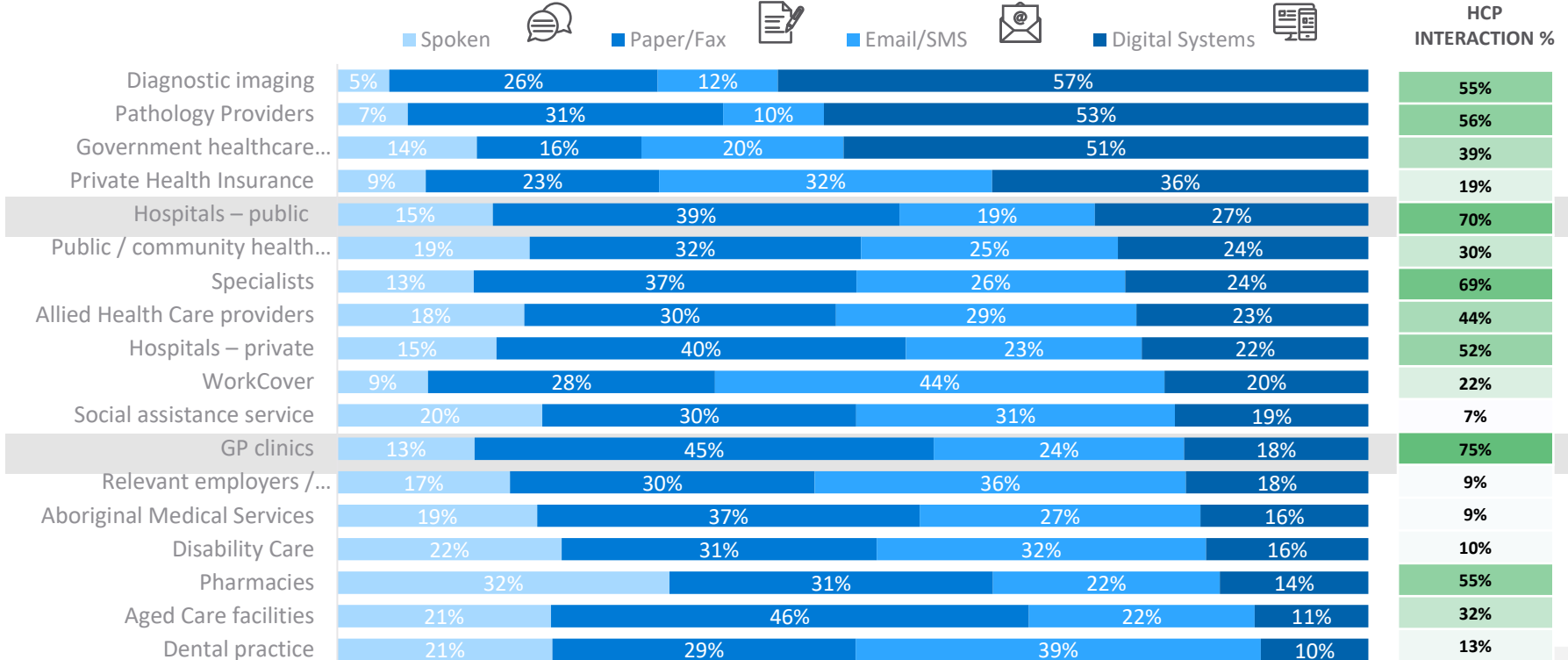
B2 When sending patient records/clinical information to each service provider, what proportion of each method are you using?  
 Base: Total HCP Sample that have interacted with the health service provider (various n=206-769)

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)

# Patient records/information are mostly received in digital form when interacting with diagnostic imaging and pathology providers; GP clinics and public hospitals are reliant on paper/fax



METHODS OF RECEIVING PATIENT RECORDS BY HEALTH SERVICE PROVIDER BY SERVICE PROVIDER TYPE



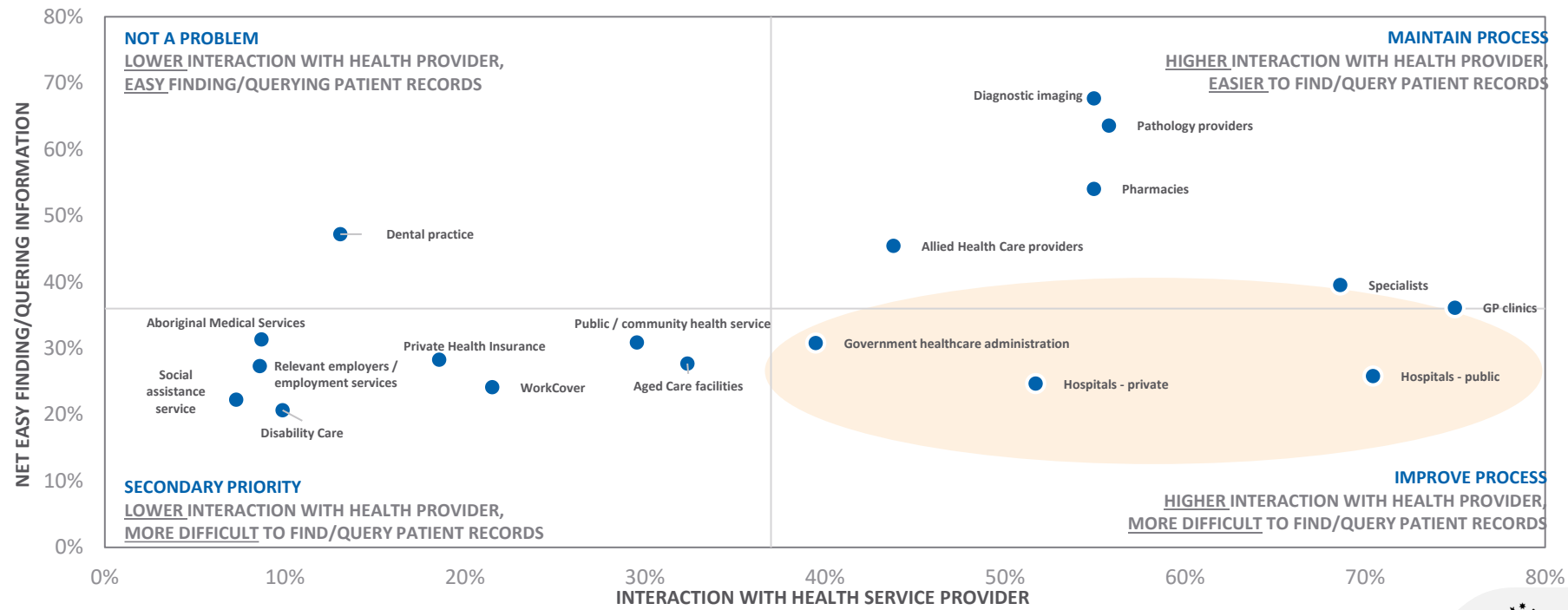
B3 When receiving patient records/clinical information from each service provider, what proportion of each method are providers using?  
 Base: Total HCP Sample that have interacted with the health service provider (various n=199-769)

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)

# A high proportion of HCPs interact with hospitals and government healthcare administration, but find the process of finding/querying information more difficult



HCP INTERACTION X EASE OF FINDING/QUERYING PATIENT RECORDS AMONG HEALTHCARE PROVIDERS

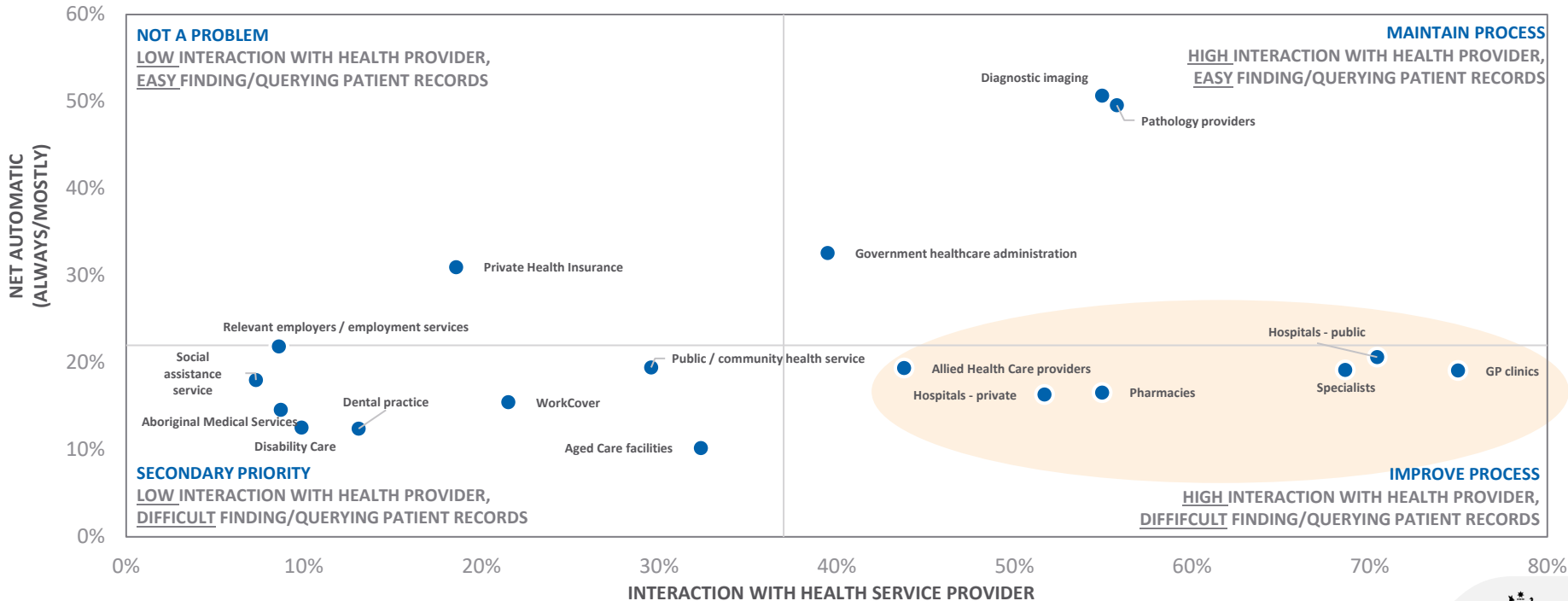


B1. Which of the following health service providers do you regularly interact with regarding patient records/clinical information? Base: Total HCP Sample (n=2989)  
 B4. Generally, when finding/querying patient records/clinical information from the following health service providers, how do you find the process?  
 Base: Total HCP Sample that have interacted with the health service provider (various n=211-775)

# A high proportion of HCPs interact with GPs, hospitals, specialists, pharmacies and allied health practices, where HCPs are mostly dependent on manual methods for integrating information from these health providers



HCP INTERACTION X AUTOMATIC PROCESS OF INTEGRATION

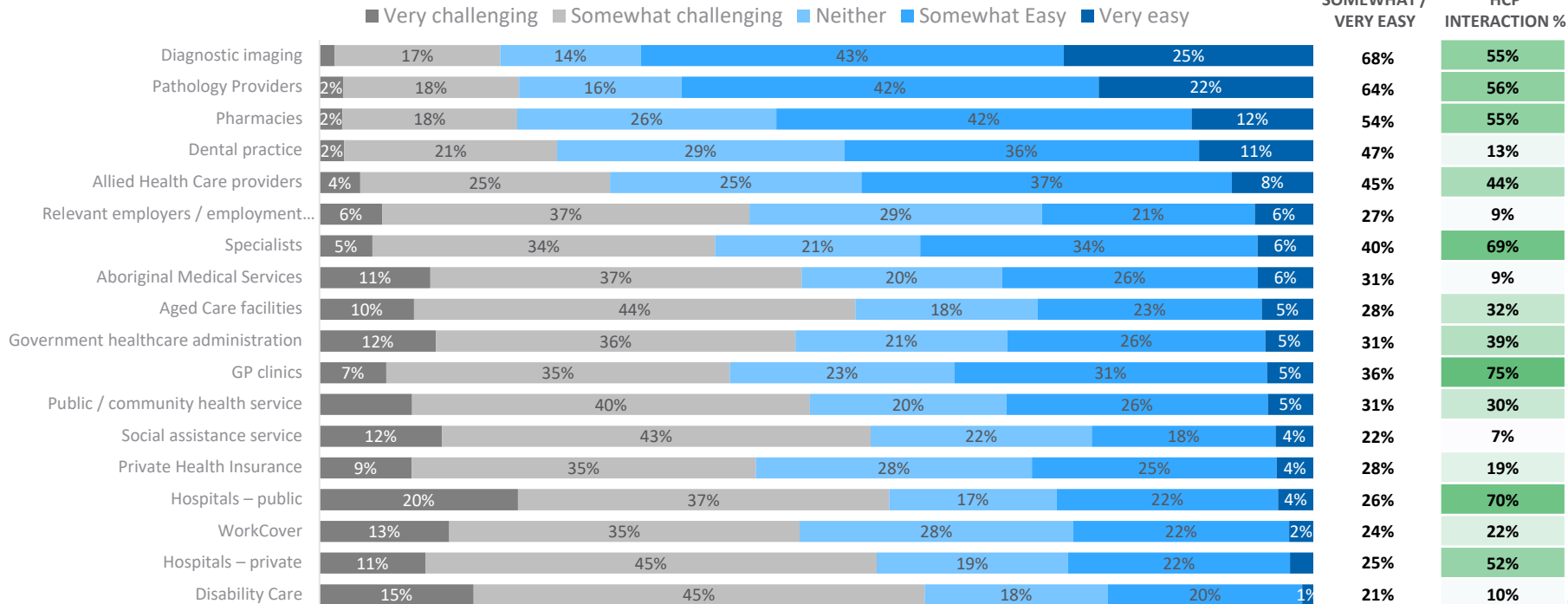


B1. Which of the following health service providers do you regularly interact with regarding patient records/clinical information? Base: Total HCP Sample (n=2989)  
 B5. When integrating patient record/clinical information received electronically from the following health service providers into your clinical systems, is the process...? Base: Total HCP Sample that have interacted with the health service provider (various n=211-775)

# Diagnostic imaging and pathology providers are deemed the easiest providers to find/query information with



## EASE OF FINDING/QUERYING PATIENT RECORDS BY HEALTH SERVICE PROVIDER (TOTAL HCPs)



B4 Generally, when finding/querying patient records/clinical information from the following health service providers, how do you find the process?  
Base: Total HCP Sample (various n=193-601)

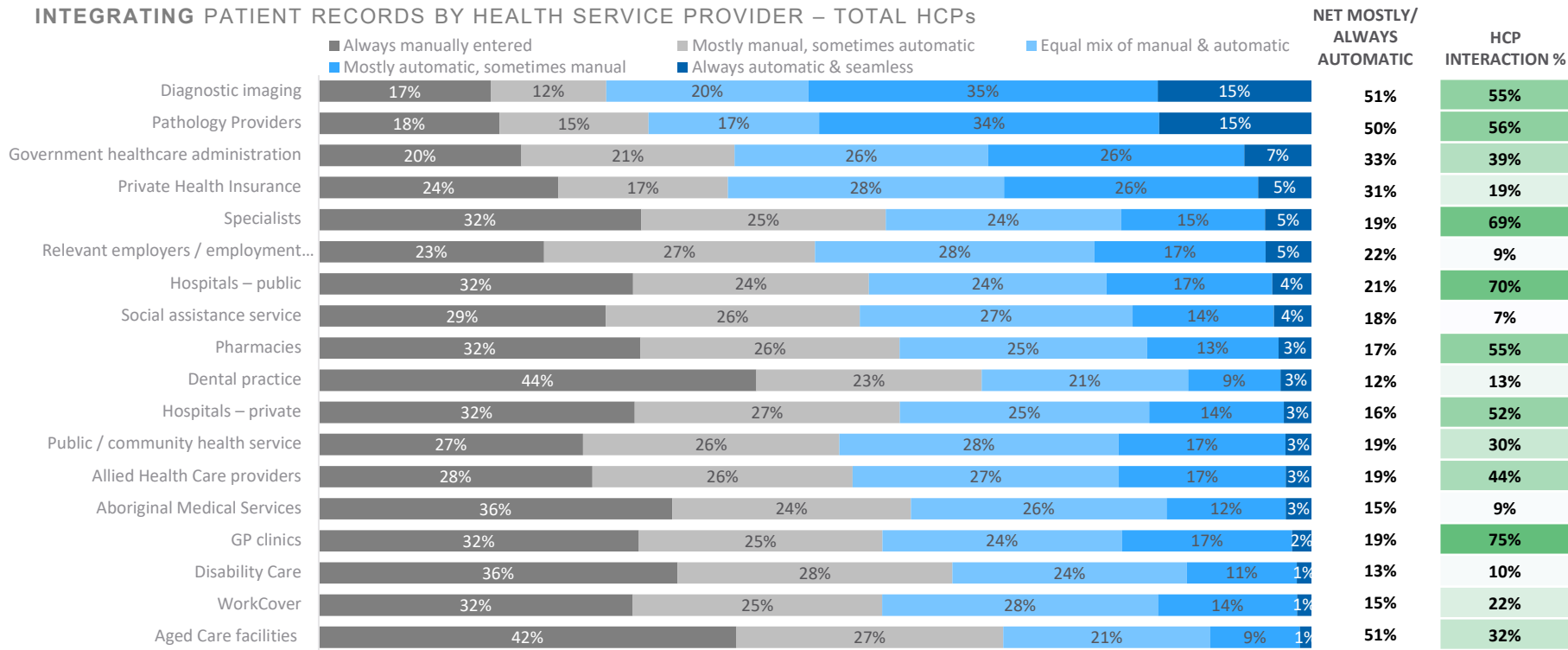
NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)



# Automatic integration of information into clinical systems is highest from diagnostic imaging and pathology providers; GP clinics have higher interaction but the integration process is mostly manual



## INTEGRATING PATIENT RECORDS BY HEALTH SERVICE PROVIDER – TOTAL HCPs



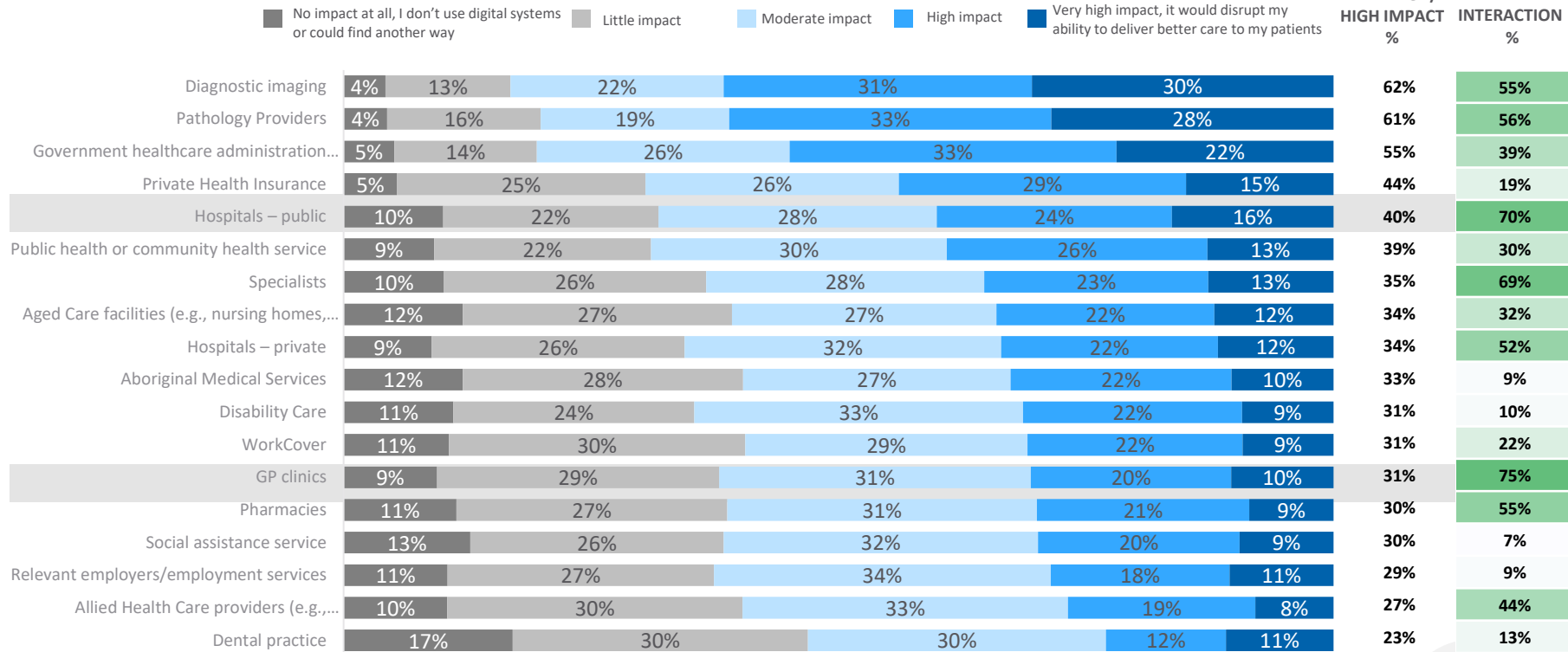
B5 When integrating patient record/clinical information received electronically from the following health service providers into your clinical systems, is the process...?  
Base: Total HCP Sample (various n=193-601)

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)

# If digital systems were not available, impact would be greatest for diagnostic imaging and pathology provider interactions



## DIGITAL INTERACTIONS IMPORTANCE BY SERVICE PROVIDER TYPE



B6 If you were unable to interact with the following healthcare providers via digital systems, what impact would this have on your ability to deliver better care to your patients?  
Base: Total HCP Sample that have interacted with the health service provider (various n=211-775)

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)







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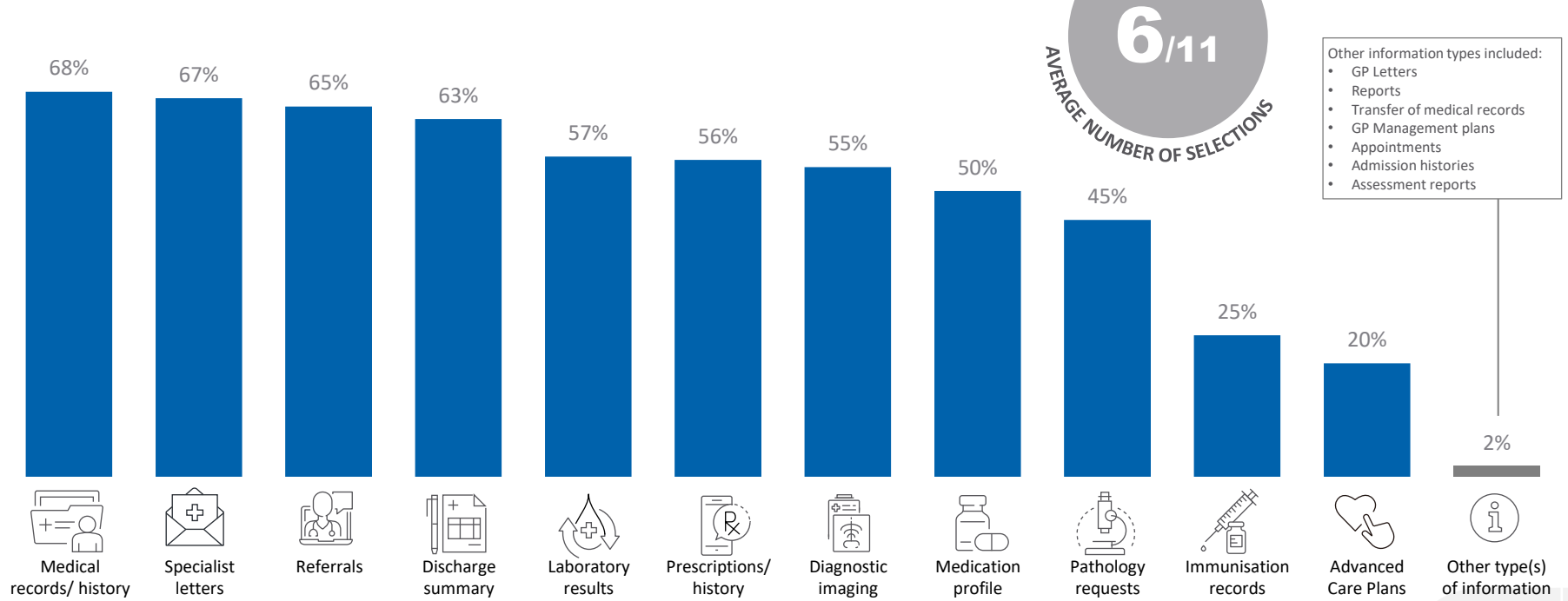
# Section 7:

## Information transfer

# Medical records/history, specialist letters, referrals and discharge summaries are the most common information types HCPs send/receive from other health service providers










INFORMATION TYPES HCPs SEND/RECEIVE (TOTAL HCPs)



Which of the following types of information do you send and receive to and from other health service providers?  
BASE: Community Pharmacy (n=2989)

# Public hospitals, GP practices and specialists are sending/receiving the most varied types of information to and from other health service providers

## INFORMATION TYPES HCPs SEND/RECEIVE BY HCP SETTING

	 TOTAL HCP	 Public Hospital	 Private Hospital	 GP practice	 Community Pharmacy	 Specialist practice outside hospitals	 Allied health outside hospitals
	Base (n) 2,989	799	268	566	510	375	428
<b>Average no. information types sent / received</b>	<b>5.7</b>	<b>6.1</b> ▲	<b>5.6</b>	<b>7.8</b> ▲	<b>4.2</b> ▼	<b>6.0</b> ▲	<b>4.0</b> ▼
Medical records/history	68%	68%	64%	80% ▲	66%	62% ▼	61% ▼
Specialist letters	67%	71% ▲	67%	87% ▲	23% ▼	86% ▲	69%
Referrals	65%	67%	56% ▼	83% ▲	17% ▼	86% ▲	83% ▲
Discharge summary	63%	77% ▲	60%	76% ▲	67%	52% ▼	26% ▼
Laboratory results	57%	69% ▲	74% ▲	84% ▲	12% ▼	78% ▲	19% ▼
Prescriptions/history	56%	51% ▼	43% ▼	66% ▲	92% ▲	46% ▼	26% ▼
Diagnostic imaging	55%	61% ▲	62% ▲	85% ▲	2% ▼	70% ▲	47% ▼
Medication profile	50%	45% ▼	51%	57% ▲	85% ▲	35% ▼	20% ▼
Pathology requests	45%	56% ▲	55% ▲	73% ▲	6% ▼	63% ▲	13% ▼
Immunisation records	25%	17% ▼	14% ▼	59% ▲	37% ▲	5% ▼	3% ▼
Advanced Care Plans	20%	21%	13% ▼	26% ▲	13% ▼	15% ▼	24% ▲
Other type(s) of information	2%	2%	2%	1%	1%	1%	5% ▲

C1 Which of the following types of information do you regularly send and/or receive to and from other health service providers?

▲ Significantly higher, ▼ Significantly lower than other group at 95% confidence interval



# Nurses/midwives and GPs send/receive the largest and most varied types of information from and to other healthcare providers

## INFORMATION SENT OR RECEIVED BY PROFESSION



	Pharmacist	Nurse / Mid-wife	GP	Allied health	Medical Specialist
<b>Average no. information types sent / received</b>	4.3 ▼	6.4 ▲	8.0 ▲	4.0 ▼	6.3 ▲
Medical records/history	65%	70%	82% ▲	62% ▼	64% ▼
Specialist letters	24% ▼	64%	89% ▲	67%	89% ▲
Referrals	17% ▼	72% ▲	83% ▲	80% ▲	79% ▲
Discharge summary	68% ▲	71% ▲	82% ▲	30% ▼	64%
Laboratory results	15% ▼	74% ▲	88% ▲	23% ▼	80% ▲
Prescriptions/history	91% ▲	48% ▼	70% ▲	26% ▼	47% ▼
Diagnostic imaging	4% ▼	59% ▲	90% ▲	47% ▼	76% ▲
Medication profile	86% ▲	49%	59% ▲	20% ▼	39% ▼
Pathology requests	8% ▼	60% ▲	78% ▲	14% ▼	65% ▲
Immunisation records	36% ▲	36% ▲	56% ▲	2% ▼	7% ▼
Advanced Care Plans	13% ▼	29% ▲	24% ▲	22%	15% ▼
Other type(s) of information	1%	3%	0%	5%	0%
<i>Base (n)</i>	611	585	426	517	806

C1 Which of the following types of information do you regularly send and/or receive to and from other health service providers?

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)

▲ Significantly higher than other group at 95% confidence interval  
▼ Significantly lower than other group at 95% confidence interval



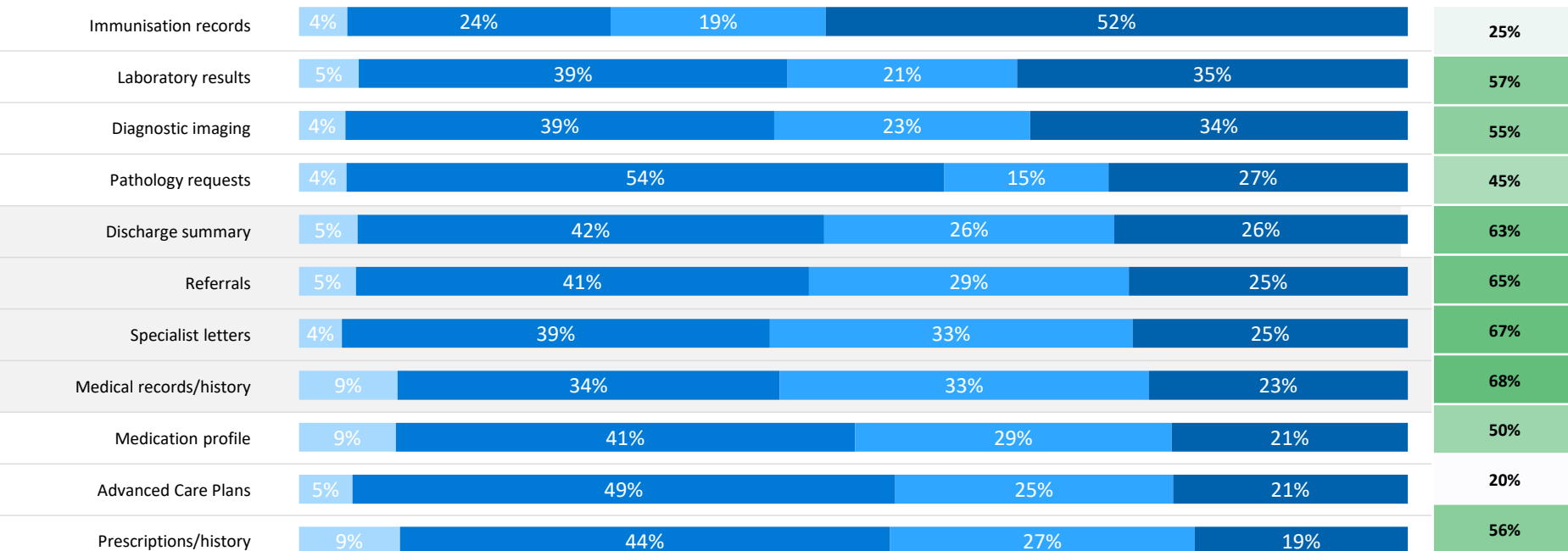
# Around a quarter of healthcare professionals are using digital systems for frequently sent information including; discharge summaries, referrals, specialist letters and medical records/history



INFORMATION TYPES SEND (TOTAL HCPs)

■ Spoken 
■ Paper/Fax 
■ Email/SMS 
■ Digital Systems 

HCPs SEND/RECEIVE



C2c When sending the following information to health service providers, how often do you use each of the following methods? C1 Which of the following types of information do you send and receive to and from other health service providers?  
BASE: Total HCPs (various n=455-859)

NOTE: the shading represents a heat map to identify the highest level of interaction (in green) to the lowest (in white)



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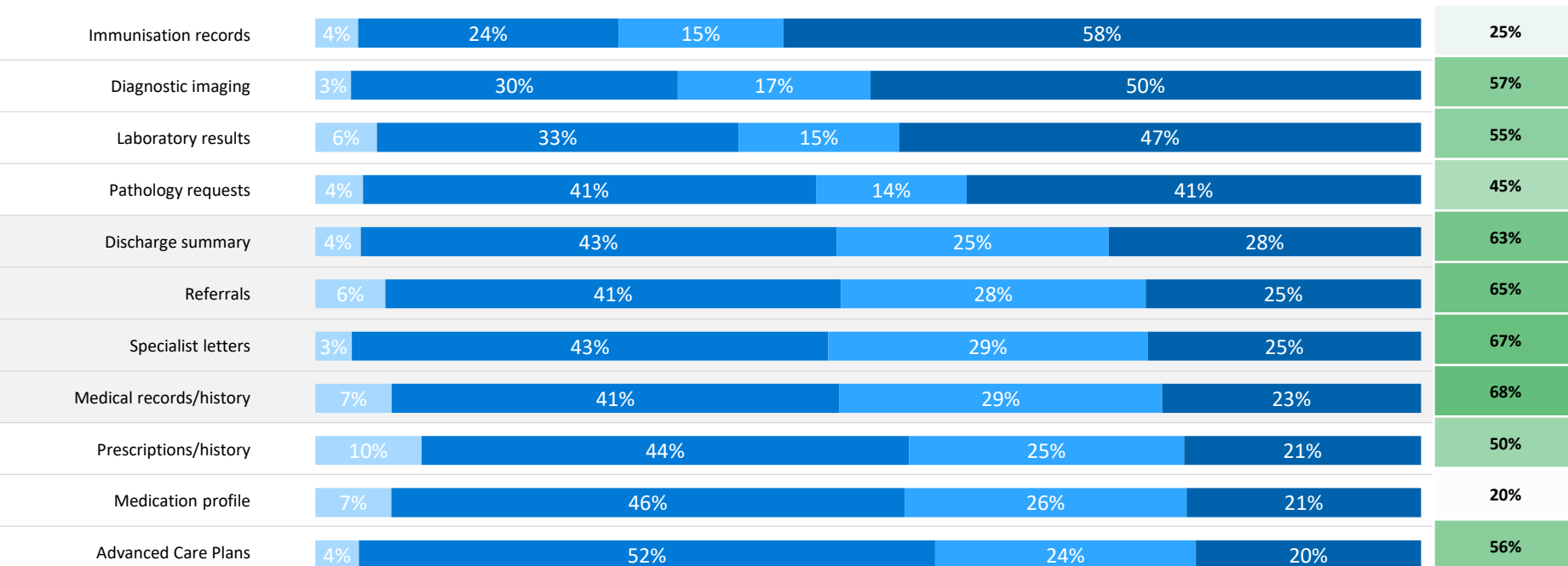
# Around a quarter of healthcare professionals are using digital systems for frequently received information including; discharge summaries, referrals, specialist letters and medical records/history



INFORMATION TYPES RECEIVED (TOTAL HCPs)



% of HCPs who receive information



C2d: And how often do you typically receive the following information from health service providers via each method? C1: Which of the following types of information do you send and receive to and from other health service providers?  
 BASE: Total HCPs (various n=455-864)

NOTE: the shading represents a head map to identify the highest level of interaction (in green) to the lowest (in white)





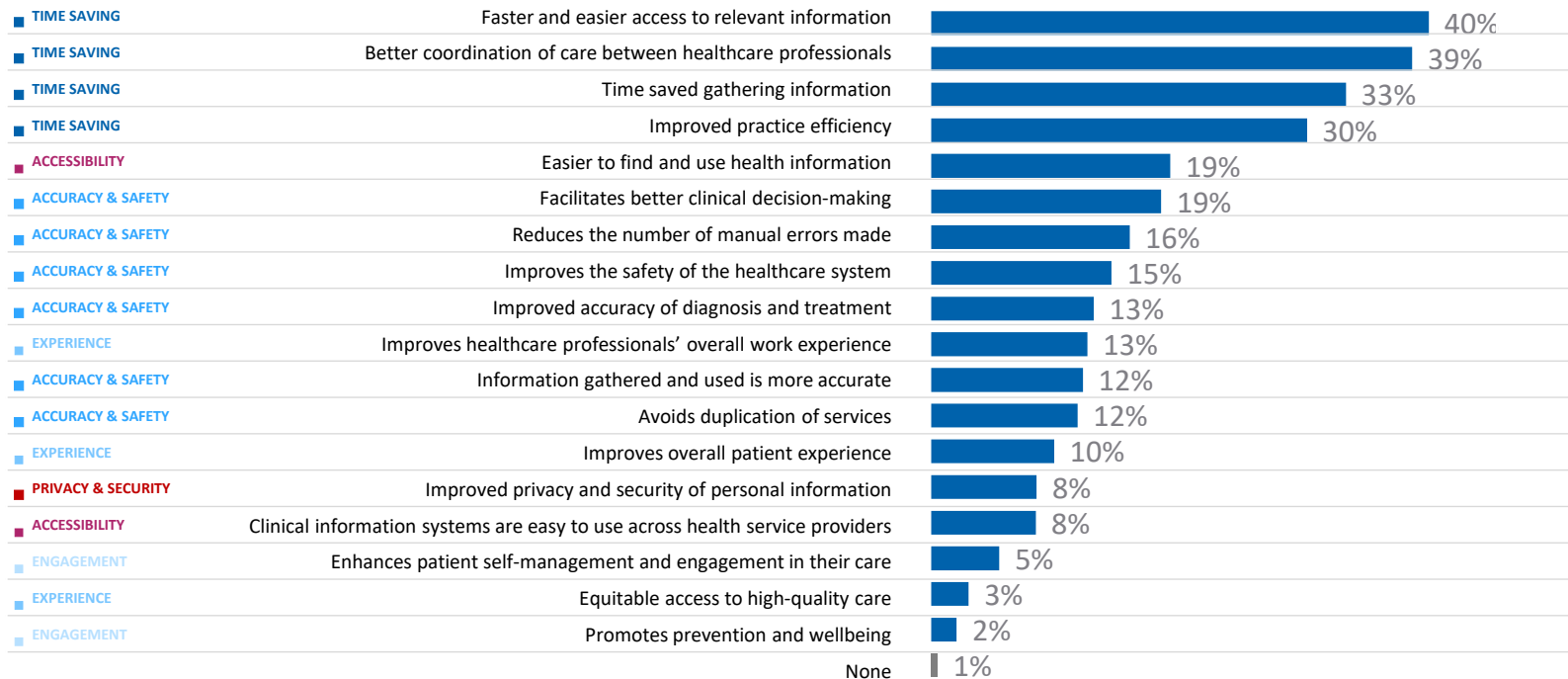
## Section 8:

# Benefits and barriers to interoperability

# Time saving is the key perceived benefit of data interoperability among healthcare professionals



## TOP 3 PERCEIVED BENEFITS OF DATA INTEROPERABILITY (TOTAL HCPs)




























E1. Which if any, do you believe are the top 3 benefits of being able to find, send, receive and integrate patient records/clinical information digitally and seamlessly via digital systems?  
Base: Total HCP Sample (n=2,989)





# Better decision making and improving the safety of the healthcare system are significantly stronger benefits for those working in public hospitals, while improved practice efficiency is significantly higher for specialist and allied health practices

## TOP 3 PERCEIVED BENEFITS OF DATA INTEROPERABILITY BY SETTING

		 TOTAL HCP	 Public Hospital	 Private Hospital	 GP practice	 Community Pharmacy	 Specialist Practice Outside Hospitals	 Allied Health Outside Hospitals
	<i>Base (n)</i>	2989	799	268	566	510	375	428
 TIME SAVING	Faster and easier access to relevant information	40%	41%	38%	42%	35%	42%	44%
 TIME SAVING	Better coordination of care between healthcare professionals	39%	39%	40%	39%	37%	32% ▼	43%
 TIME SAVING	Time saved gathering information	33%	33%	33%	31%	35%	39%	30%
 TIME SAVING	Improved practice efficiency	30%	25% ▼	31%	32%	23% ▼	42% ▲	37% ▲
 ACCESSIBILITY	Easier to find and use health information	19%	19%	23%	18%	18%	20%	20%
 ACCURACY & SAFETY	Facilitates better clinical decision-making	19%	23% ▲	14%	17%	17%	17%	18%
 ACCURACY & SAFETY	Reduces the number of manual errors made	16%	11% ▼	18%	15%	29% ▲	14%	12%
 ACCURACY & SAFETY	Improves the safety of the healthcare system	15%	21% ▲	13%	14%	15%	11%	7% ▼
 ACCURACY & SAFETY	Improved accuracy of diagnosis and treatment	13%	15%	16%	13%	12%	10%	12%
 EXPERIENCE	Improves healthcare professionals' overall work experience	13%	11%	14%	13%	14%	14%	13%
 ACCURACY & SAFETY	Information gathered and used is more accurate	12%	14%	12%	10%	16%	9%	9%
 ACCURACY & SAFETY	Avoids duplication of services	12%	13%	11%	13%	9%	16%	7% ▼
 EXPERIENCE	Improves overall patient experience	10%	9%	10%	9%	11%	9%	12%
 PRIVACY & SECURITY	Improved privacy and security of personal information	8%	6%	8%	10%	7%	9%	11%
 ACCESSIBILITY	Clinical information systems are easy to use across health service providers	8%	10%	6%	8%	7%	9%	8%
 ENGAGEMENT	Enhances patient self-management and engagement in their care	5%	4%	4%	5%	9% ▲	5%	6%
 EXPERIENCE	Equitable access to high-quality care	3%	4%	3%	2%	3%	1%	4%
 ENGAGEMENT	Promotes prevention and wellbeing	2%	1%	3%	3%	2%	1%	4%

E1 Which if any, do you believe are the top 3 benefits of being able to find, send, receive and integrate patient records/clinical information digitally and seamlessly via digital systems?

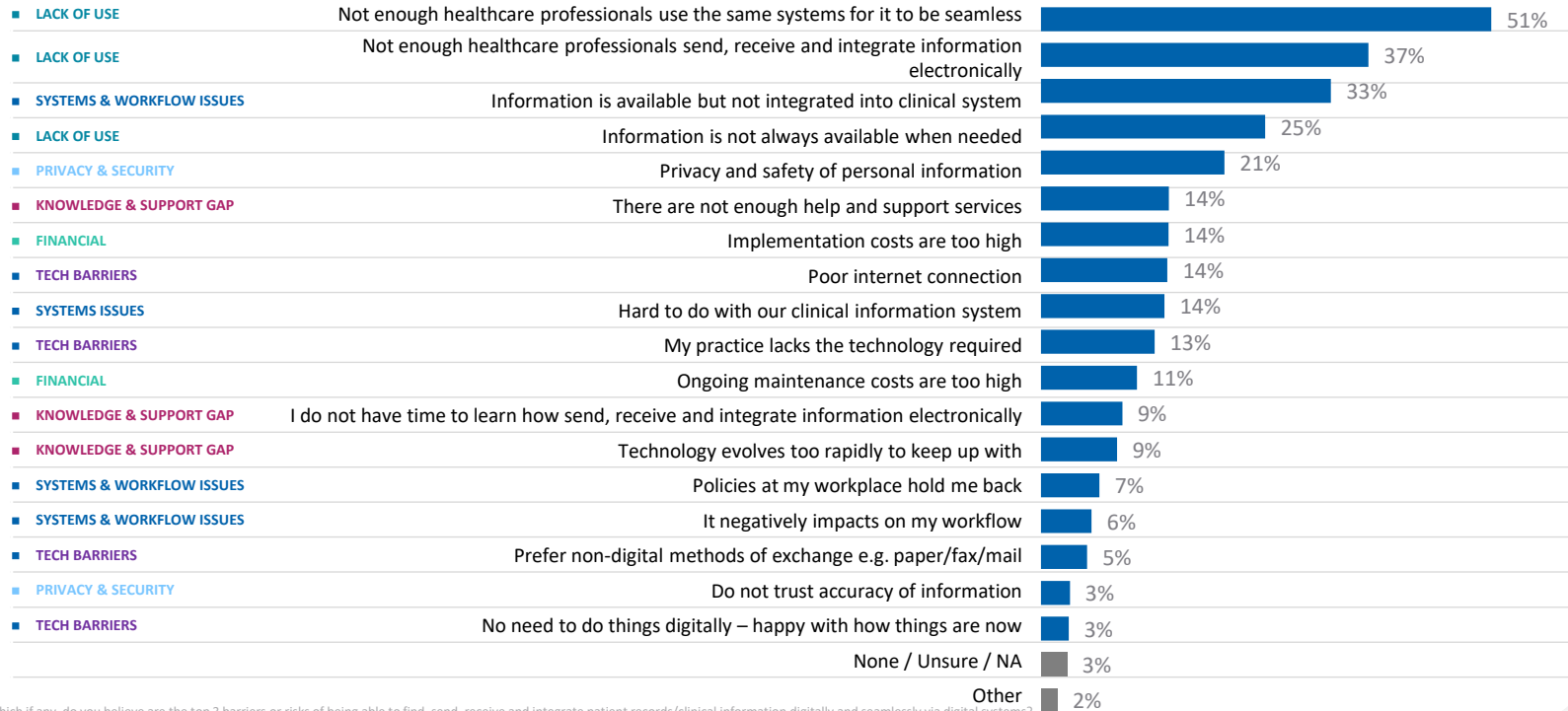
▲ Significantly higher than other group at 95% confidence interval  
▼ Significantly lower than other group at 95% confidence interval



# Perceived lack of use by HCPs is the main barrier to interoperability for healthcare professionals



## TOP 3 PERCEIVED BARRIERS OF DATA INTEROPERABILITY (TOTAL HCPs)










E2 Which if any, do you believe are the top 3 barriers or risks of being able to find, send, receive and integrate patient records/clinical information digitally and seamlessly via digital systems?  
Base: Total HCP Sample (n=2,989)



# Barriers also vary by setting type; those working in a public hospital are more likely to say that information is not integrated into clinical systems and private hospitals cite a lack of technology required

TOP 3 PERCEIVED BARRIERS OF DATA INTEROPERABILITY BY SETTING

		 TOTAL HCP	 Public Hospital	 Private Hospital	 GP practice	 Community Pharmacy	 Specialist Practice Outside Hospitals	 Allied Health Outside Hospitals	
		<i>Base (n)</i>	2989	799	268	566	510	375	428
■ LACK OF USE	Not enough healthcare professionals use the same systems for it to be seamless	51%	54%	44%	46%	54%	47%	56%	
■ LACK OF USE	Not enough healthcare professionals send, receive and integrate information electronically	37%	35%	33%	40%	47% ▲	29% ▼	37%	
■ SYSTEMS & WORKFLOW ISSUES	Information is available but not integrated into clinical system	33%	41% ▲	30%	33%	26% ▼	35%	26% ▼	
■ LACK OF USE	Information is not always available when needed	25%	25%	23%	32% ▲	30%	26%	14% ▼	
■ PRIVACY & SECURITY	Privacy and safety of personal information	21%	19%	22%	26% ▲	18%	20%	21%	
■ KNOWLEDGE & SUPPORT GAP	There are not enough help and support services	14%	14%	14%	15%	17%	17%	9% ▼	
■ FINANCIAL	Implementation costs are too high	14%	15%	19%	12%	10% ▼	14%	20% ▲	
■ TECH BARRIERS	Poor internet connection	14%	14%	13%	13%	18% ▲	13%	14%	
■ SYSTEMS ISSUES	Hard to do with our clinical information system	14%	18% ▲	18%	8% ▼	6% ▼	17%	17%	
■ TECH BARRIERS	My practice lacks the technology required	13%	14%	21% ▲	10%	6% ▼	12%	18% ▲	
■ FINANCIAL	Ongoing maintenance costs are too high	11%	6% ▼	12%	12%	11%	13%	16% ▲	
■ KNOWLEDGE & SUPPORT GAP	I do not have time to learn how send, receive and integrate information electronically	9%	8%	7%	11%	7%	12%	11%	
■ KNOWLEDGE & SUPPORT GAP	Technology evolves too rapidly to keep up with	9%	7%	5%	10%	11%	9%	9%	
■ SYSTEMS & WORKFLOW ISSUES	Policies at my workplace hold me back	7%	12% ▲	9%	4% ▼	3% ▼	5%	4%	
■ SYSTEMS & WORKFLOW ISSUES	It negatively impacts on my workflow	6%	5%	5%	4%	10% ▲	6%	5%	
■ TECH BARRIERS	Prefer non-digital methods of exchange e.g., paper/fax/mail	5%	3% ▼	3%	5%	6%	6%	9% ▲	
■ PRIVACY & SECURITY	Do not trust accuracy of information	3%	2% ▼	4%	4%	6% ▲	2%	3%	
■ TECH BARRIERS	No need to do things digitally – happy with how things are now	3%	1% ▼	4%	3%	2%	4%	7% ▲	

E2 Which if any, do you believe are the top 3 barriers or risks of being able to find, send, receive and integrate patient records/clinical information digitally and seamlessly via digital systems?

▲ ▼ Significantly higher/lower than other group at 95% confidence interval

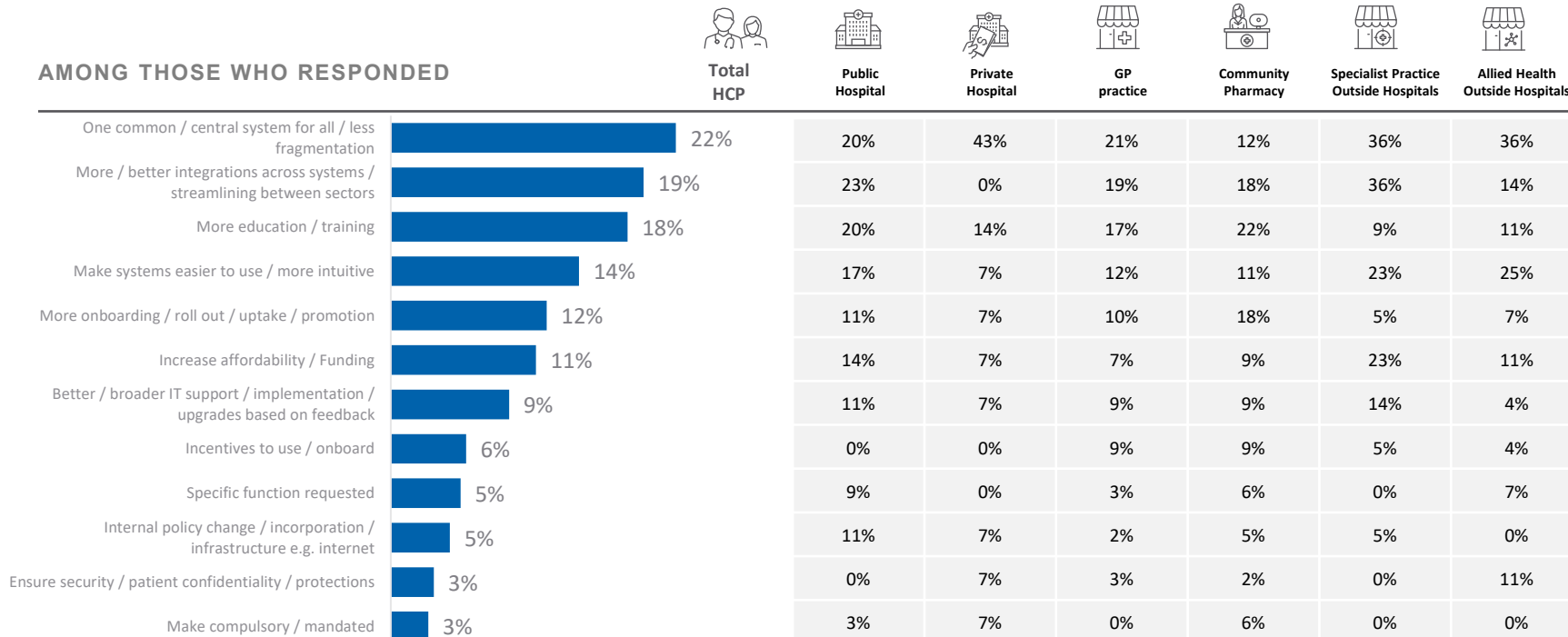


# More seamless integrations between systems and training / education is the most common request from most HCPs



## PERCEIVED IMPROVEMENTS TO ENCOURAGE DIGITAL INFORMATION EXCHANGE (TOTAL HCPs)

### AMONG THOSE WHO RESPONDED



E3 What suggestions would you make to encourage the digital exchange of information between health service providers in your network via digital systems?

Base: HCP who gave a suggestion (n=243)

Base (n=)

35

14

58

82







22

28



# Verbatims for suggestions to encourage digital exchange of information

## PERCEIVED IMPROVEMENTS TO ENCOURAGE DIGITAL INFORMATION EXCHANGE - VERBATIMS

	 <b>Public Hospital</b>	 <b>Private Hospital</b>	 <b>GP practice</b>	 <b>Community Pharmacy</b>	 <b>Specialist Practice Outside Hospitals</b>	 <b>Allied Health Outside Hospitals</b>
<b>One common / central system for all / less fragmentation</b>	<i>"If the digital system can be the same for all network cross all hospitals"</i>	<i>"Maybe creating one app/universe where all systems are overlapped/accessible"</i>	<i>"Everyone using the same system"</i>	<i>"Make it easier for all health professionals to access the same system to allow for streamlined communication"</i>	<i>"Have one system that everyone uses"</i>	<i>"I would adopt a universal software platform that was easy to use"</i>
<b>More / better integrations across systems / streamlining between sectors</b>	<i>"Agree on platforms for data transfer between public and private sector, avoid the use of multiple (incompatible) patient databases"</i>	-	<i>"Encourage all health provider to use digital exchange. Network to connect different systems to improve integration"</i>	<i>"The systems used by each practice /work need to be able to integrate with each other so that information remains secure , accurate and able to be interpreted regardless of workplace. There is no point in having e health if the platforms aren't integrated"</i>	<i>"Ability to integrate services would be fantastic"</i>	<i>"Encourage better integration between different systems"</i>
<b>More education / training</b>	<i>"More education on use of digital systems"</i>	<i>"IT providers to hold joint workshops to encourage better use of digital systems"</i>	<i>"Difficult to navigate, more education needed"</i>	<i>"More education about how it works"</i>	<i>"More education and publicity about digital systems to encourage health care workers to use similar and compatible programs"</i>	<i>"Offering systems which were interoperable, and training would be provided and costs could be subsidized"</i>
<b>Make systems easier to use / more intuitive</b>	<i>"More user-friendly platforms"</i>	<i>"Ease of use and access"</i>	<i>"Should be more user friendly. Easier to implement"</i>	<i>"Make it easier to use. I've heard too many 'it's too difficult or it slows everything down"</i>	<i>"Improve operating system to be more user friendly"</i>	<i>"Software is easy to learn and straightforward to use"</i>
<b>More onboarding / roll out / uptake / promotion</b>	<i>"Increase awareness of what is available, and training provided"</i>	<i>"All health care providers need to be on-board"</i>	<i>"Encourage use of Health records - I don't know what further incentives you could use., It is a no brainer!!"</i>	<i>"If more health providers use the system"</i>	<i>"Government funding will attract more health care providers to take up digital systems"</i>	<i>"Encourage more take up in digital exchanges"</i>
<b>Increase affordability / Funding</b>	<i>"Funds or grants to allow infrastructure at practices to be in place"</i>	<i>"If everyone had the same system and implementation costs were low then it would encourage all health care providers"</i>	<i>"Subsidies to fund increased technology use in practice. Paid education to learn how to use digital systems"</i>	<i>"Government can subsidize the implementation of digital systems"</i>	<i>"Cheaper and better, it support"</i>	<i>"Cheap/free to use or own the software"</i>

E3 What suggestions would you make to encourage the digital exchange of information between health service providers in your network via digital systems?  
 Base: HCP who gave a suggestion (n=243)



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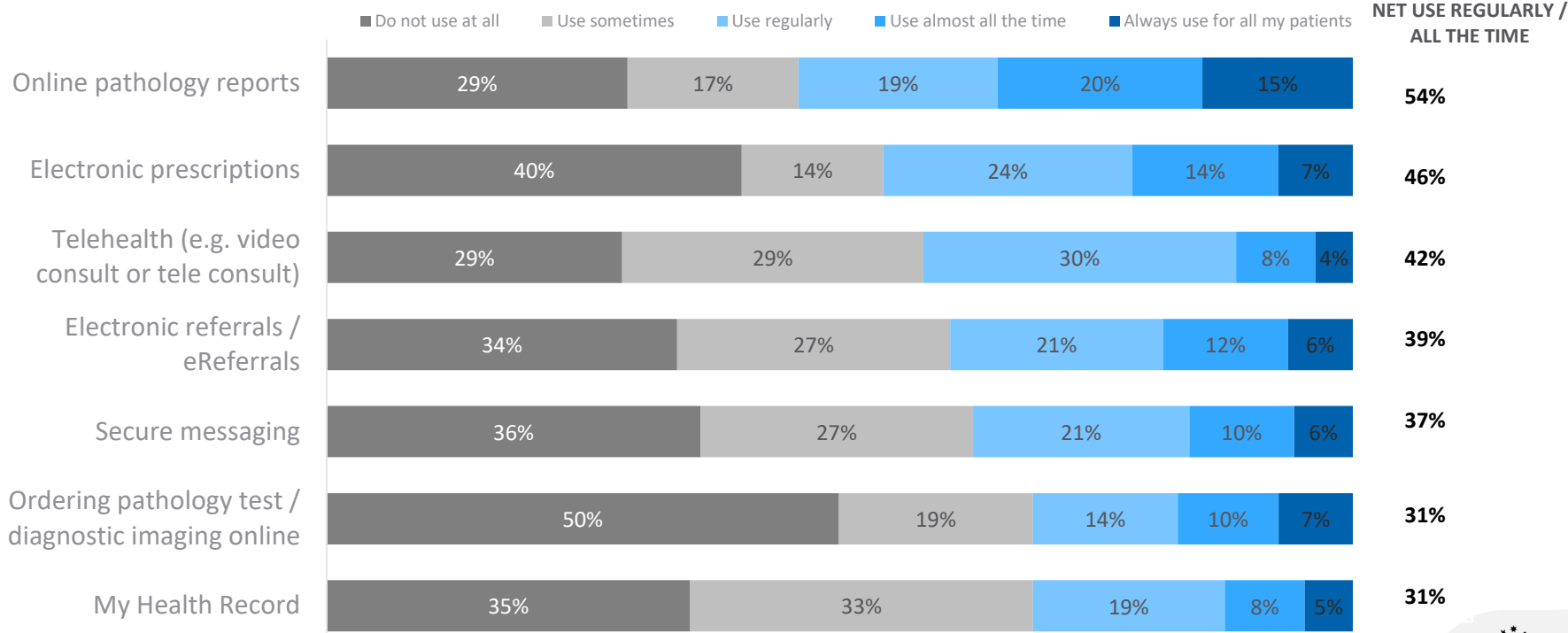
## Section 9:

# Digital health usage

# Online pathology reports, electronic prescriptions and telehealth are the most commonly used digital health services



DIGITAL HEALTH SERVICE USE (TOTAL HCPs)



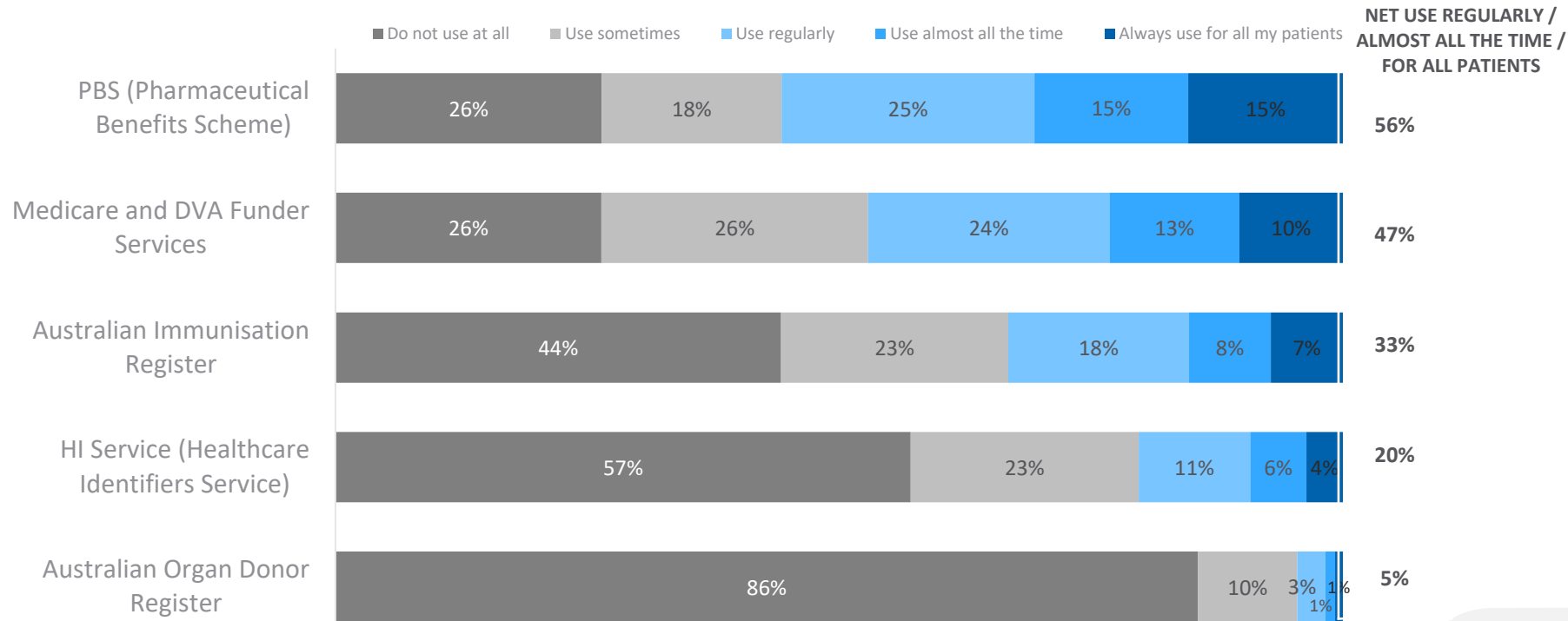
D2a How frequently do you use each of the following digital health services in the management of your patients?  
 Base: Total HCP Sample (n=2,989)



# The PBS is the most used federal government service used by HCPs, followed by Medicare / DVA funded services



## AUSTRALIAN GOVERNMENT HEALTH SERVICE USE (TOTAL HCPs)










D2b How frequently do you access each of the following in the management of your patients?  
Base: Total HCP Sample (n=2,989)



# The top two healthcare services used have differential usage across settings



HEALTH SERVICE USED ALWAYS/ALMOST ALWAYS/REGULARLY BY SETTING, OCCUPATION, STATE AND LOCATION

		 TOTAL HCP	 Public Hospital	 Private Hospital	 GP practice	 Community Pharmacy	 Specialist Practice Outside Hospitals	 Allied Health Outside Hospitals
	Base (n)	2989	799	268	566	510	375	428
AUST GOV	PBS (Pharmaceutical Benefits Scheme)	56%	50%	48%	64%	89%	64%	17%
DIGITAL	Online pathology reports	54%	76%	69%	76%	9%	67%	18%
AUST GOV	Medicare and DVA Funder Services	47%	30%	43%	50%	58%	59%	56%
DIGITAL	Electronic prescriptions	46%	36%	24%	66%	95%	28%	11%
DIGITAL	Telehealth (e.g., video consult or tele consult)	42%	51%	33%	65%	12%	53%	25%
DIGITAL	Electronic referrals / eReferrals	39%	49%	29%	54%	16%	41%	33%
DIGITAL	Secure messaging	37%	31%	37%	49%	33%	46%	30%
AUST GOV	Australian Immunisation Register	33%	20%	14%	69%	66%	9%	5%
AUST GOV	My Health Record	31%	38%	24%	46%	36%	15%	12%
DIGITAL	Ordering pathology test / diagnostic imaging online	31%	50%	31%	42%	7%	30%	11%
AUST GOV	HI Service (Healthcare Identifiers Service)	20%	10%	14%	35%	40%	12%	8%
AUST GOV	Australian Organ Donor Register	5%	6%	6%	6%	4%	3%	1%

D2a How frequently do you use each of the following digital health services in the management of your patients?  
D2b How frequently do you access each of the following in the management of your patients?

NOTE: the shading represents a heat map to identify which digital health services are most used (green) and least used (white)





Australian Government

Australian Digital Health Agency

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