

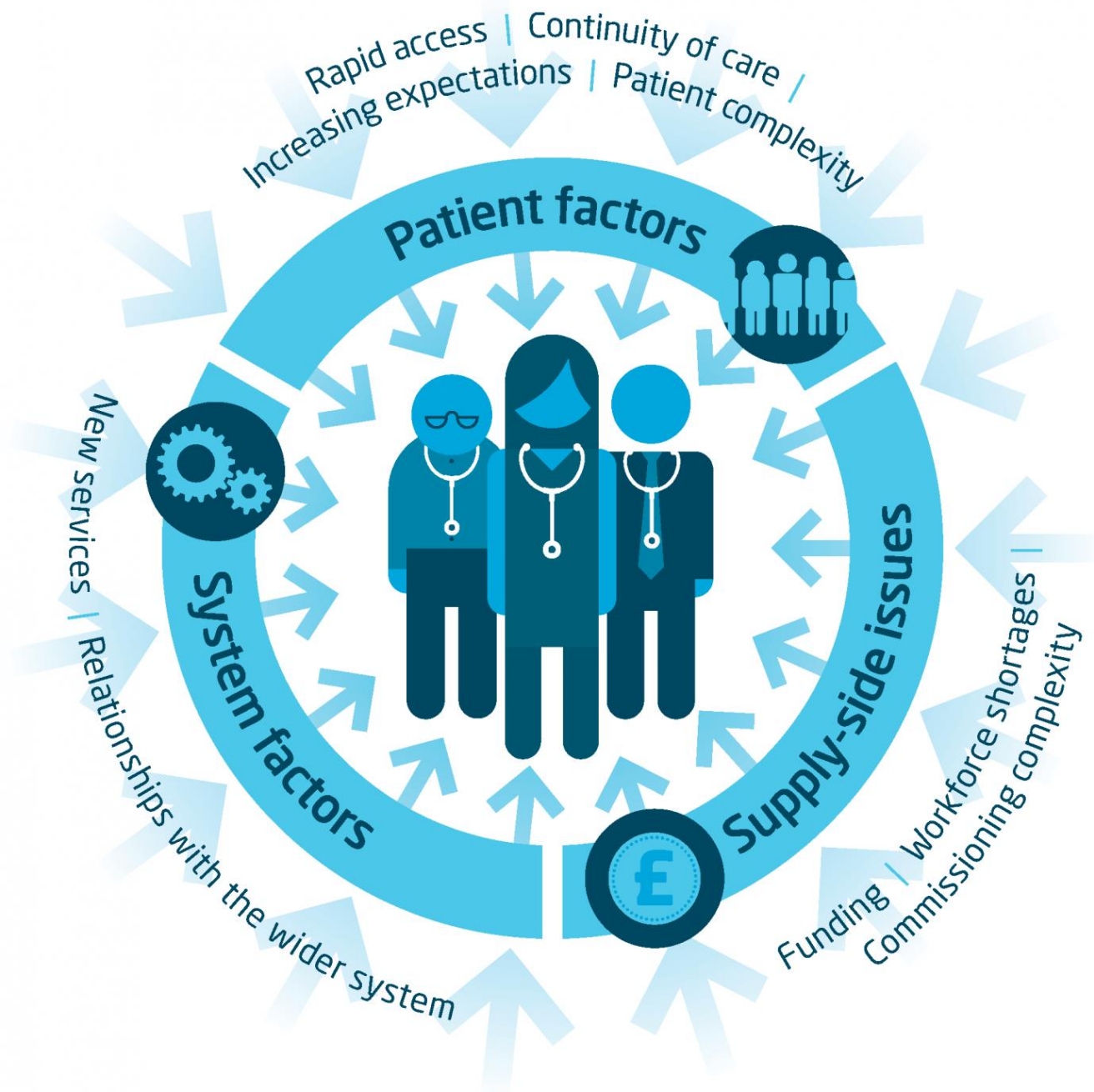
Exploring the potential impact of integrating pharmacists into general practice in Ireland

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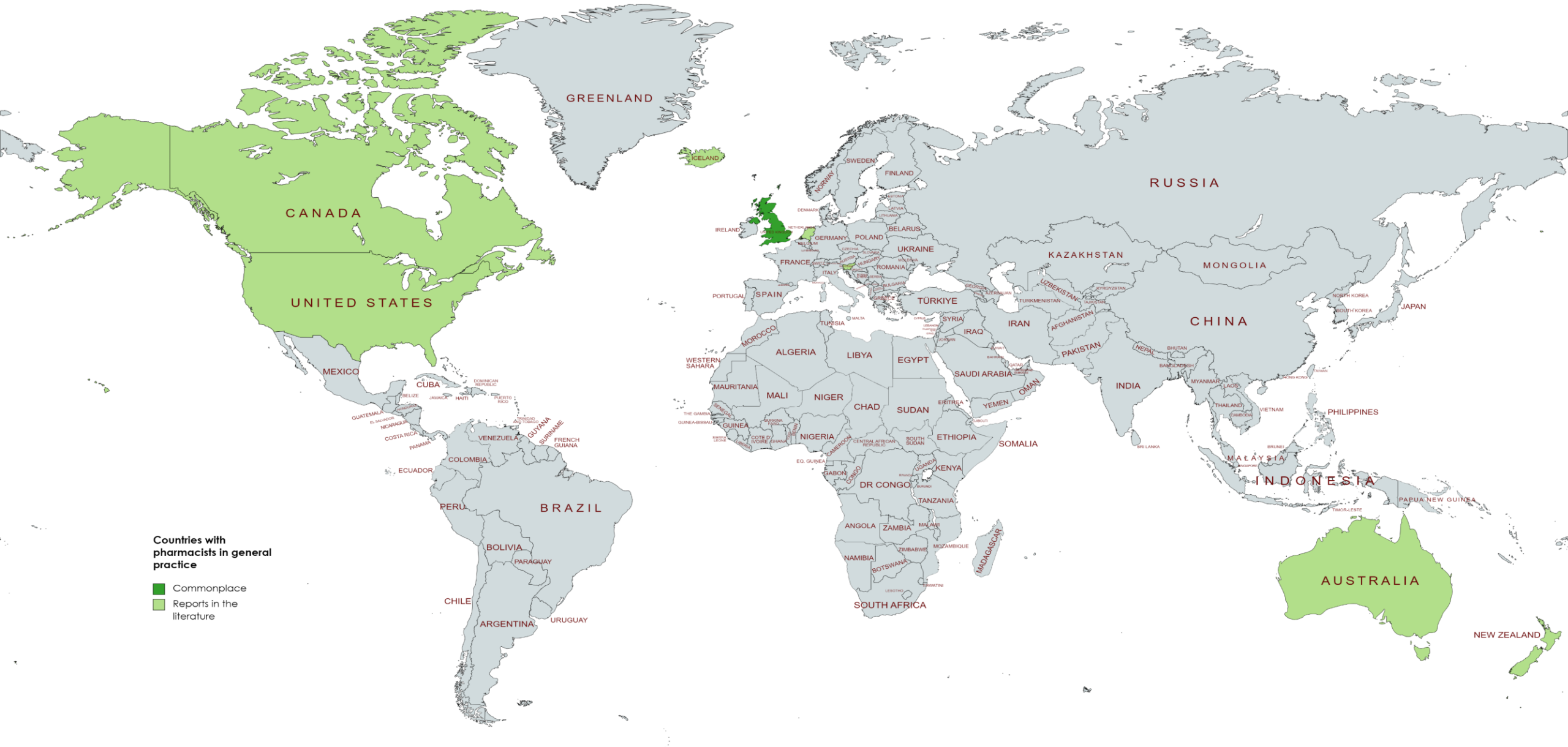


"The Health Service Executive predicts a **GP shortage** of between 493 - 1,380 by 2025".

"...over 29.1 million consultations take place in Irish general practice every year. **Innovative interventions to increase the capacity of general practice** are needed to ensure high-quality care continues to be accessible in Ireland".



Where do pharmacists work in general practices?



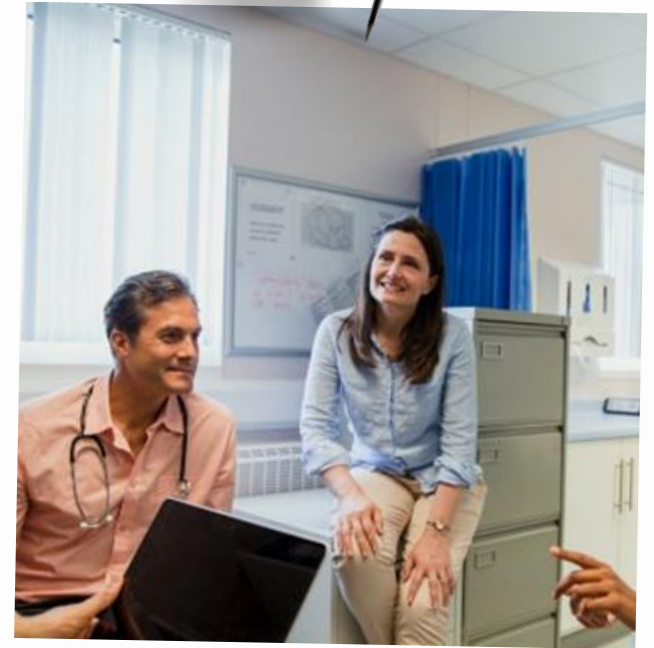
A day in the life of a general practice pharmacist



Managing chronic disease
e.g. high blood pressure



Remote medication
reviews in person/by
phone



Multidisciplinary team
meetings with GPs and
practice nurses

Other roles for pharmacists in general practice¹



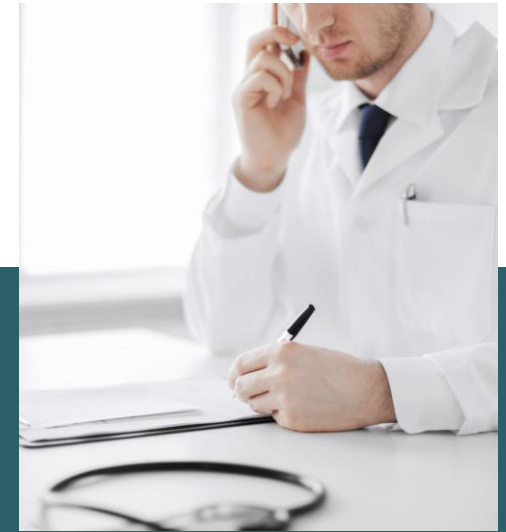
Management of the repeat prescribing process



Checking hospital discharge prescriptions for errors or omissions



Conducting audits or quality improvement projects



Independent prescribing

Outcomes of pharmacists in general practice



Clinical outcomes

Improved control of cholesterol, diabetes, blood pressure, and reduced cardiovascular risk.



Economic outcomes

Reduced expenditure on medications and reduced hospital-bed days.



Health systems outcomes

Reduced emergency department visits and improved access to appointments with GPs.



Patient outcomes

Improved medication adherence, understanding of long-term conditions, and overall satisfaction with care



Impact on GPs

Increased time to dedicate to patient-facing tasks, increased prescribing support, better life-work balance.



Impact on pharmacists

Greater perceived utilisation of training and job satisfaction.

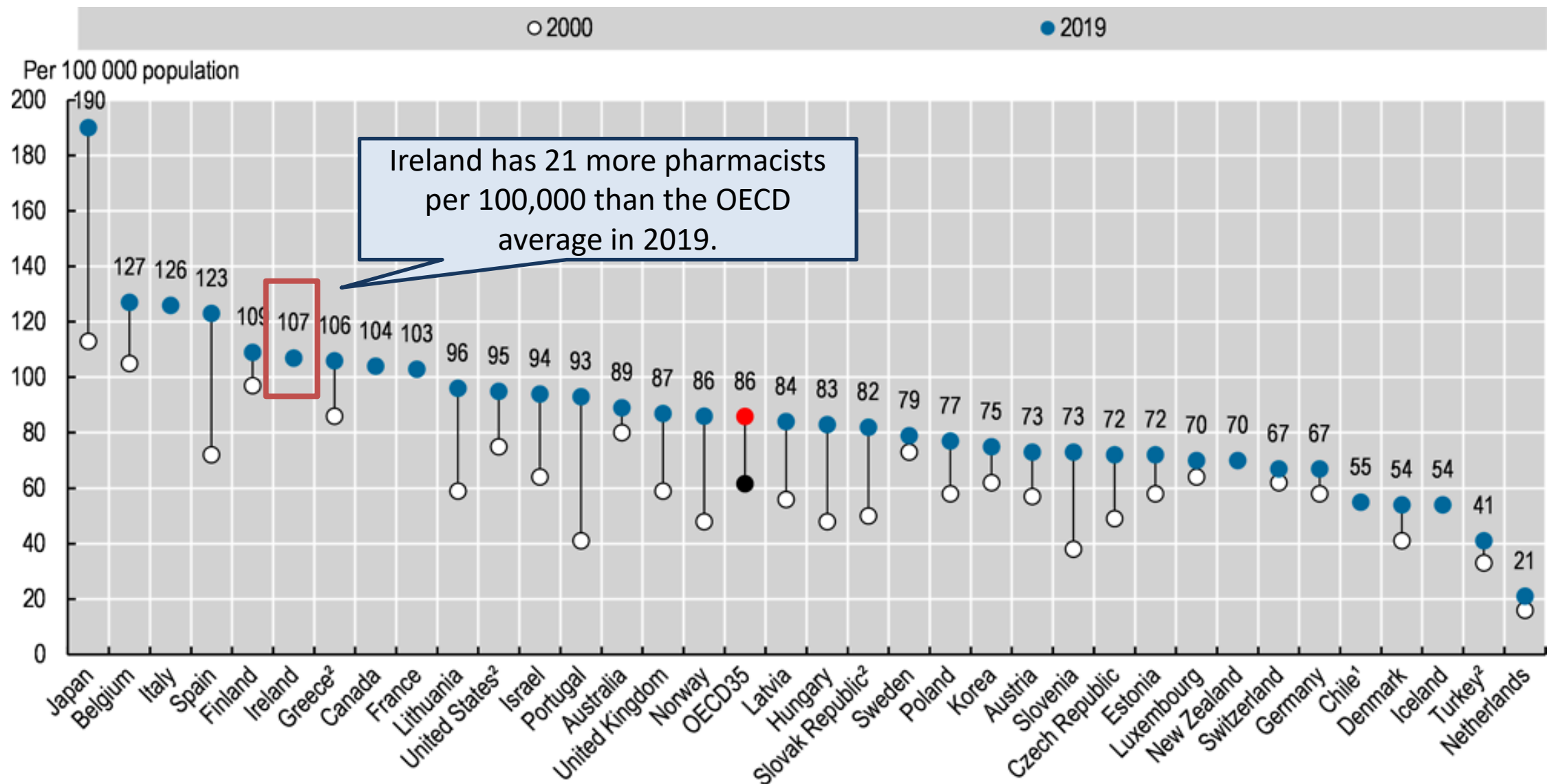


Figure 1. Practising pharmacists, 2000 and 2019 (or nearest years).
Source: OECD Health Statistics 2021.

What do pharmacists in Ireland think of working in GP practices?



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Exploratory Research in Clinical
and Social Pharmacy



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Exploring pharmacists' perceptions of integrating pharmacists into the general practice setting

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*“So, there's a **huge appetite for change**, both from the public and from the pharmacist perspective, and there is a window there now because of **health services being under so much pressure**, and we're a **potential solution**. I think hopefully all these things will align and change will happen. But it needs to happen very much from the top.”² [Pharmacist 7]*



What did we do?



Literature review

Establish GPs' views on pharmacists working in practices



Interview study

Interviewed 17 GPs in depth on their views of integrating pharmacists into practices.



Survey study

Surveyed 152 GPs on their attitudes towards integrating pharmacists into practices.



Pharmacist intervention in GP practices and cost analysis

A pharmacist-led medication reviews in 5-nursing home affiliated GP practices.

Review of the literature - What did we find?



- 19 studies which describe GPs' views of working with pharmacists in general practices.
- Little research has looked at GPs' views prior to working alongside pharmacists i.e. their perceptions on the role.
- GPs find pharmacists particularly useful for their input in **managing patients with complex medication needs**.
- **Role definition key to prevent overlap with others' roles.**
- Pharmacists **↑ patient safety and practice capacity.**
- **External funding needed** to support integrating pharmacists.



Interview study - What did we find?



- GPs' primarily positive about general practice-based pharmacists.

“I mean the demographics of my practice in particular would be an older practice. So, with multiple comorbidities, polypharmacy and those patients tend to be quite complicated and I think definitely maybe you know having input, having regular or scheduled input from pharmacy would be beneficial.” [GP 4]

Interview study - What did we find?



- GPs' **primarily positive** about general practice-based pharmacists.
- GPs predict pharmacists would encourage **↑ evidence-based and cost effective prescribing.**
- **Patient outcomes and practice capacity** likely to improve.
- Uncertainty concerning **impact on workloads.**
- Concerns about **how pharmacist roles will be funded** in Ireland.



“...but initially it would need to be HSE-funded...you know once it became... if it became the norm and GPs could see the value of it to the practice then I would say that they would be happy to part-fund it and it would have to HSE-funded initially.” [GP 16]

Survey Study - What did we find?



- Majority of GPs (78%) said they **would partake in a pilot study.**
 - Most GPs (84%) who wouldn't partake said they didn't have space in their practice for a pharmacist.
- Practices best suited to work with a pharmacist:
 - Those embedded in **purpose-built primary care centres.**
 - Practices in **more urban settings.**
 - Larger practices with **> 1 GP working there.**
- Most GPs (85%) thought the role being **fully funded by the government** was most feasible funding strategy.
- Frequency of pharmacist presence depends on practice size.

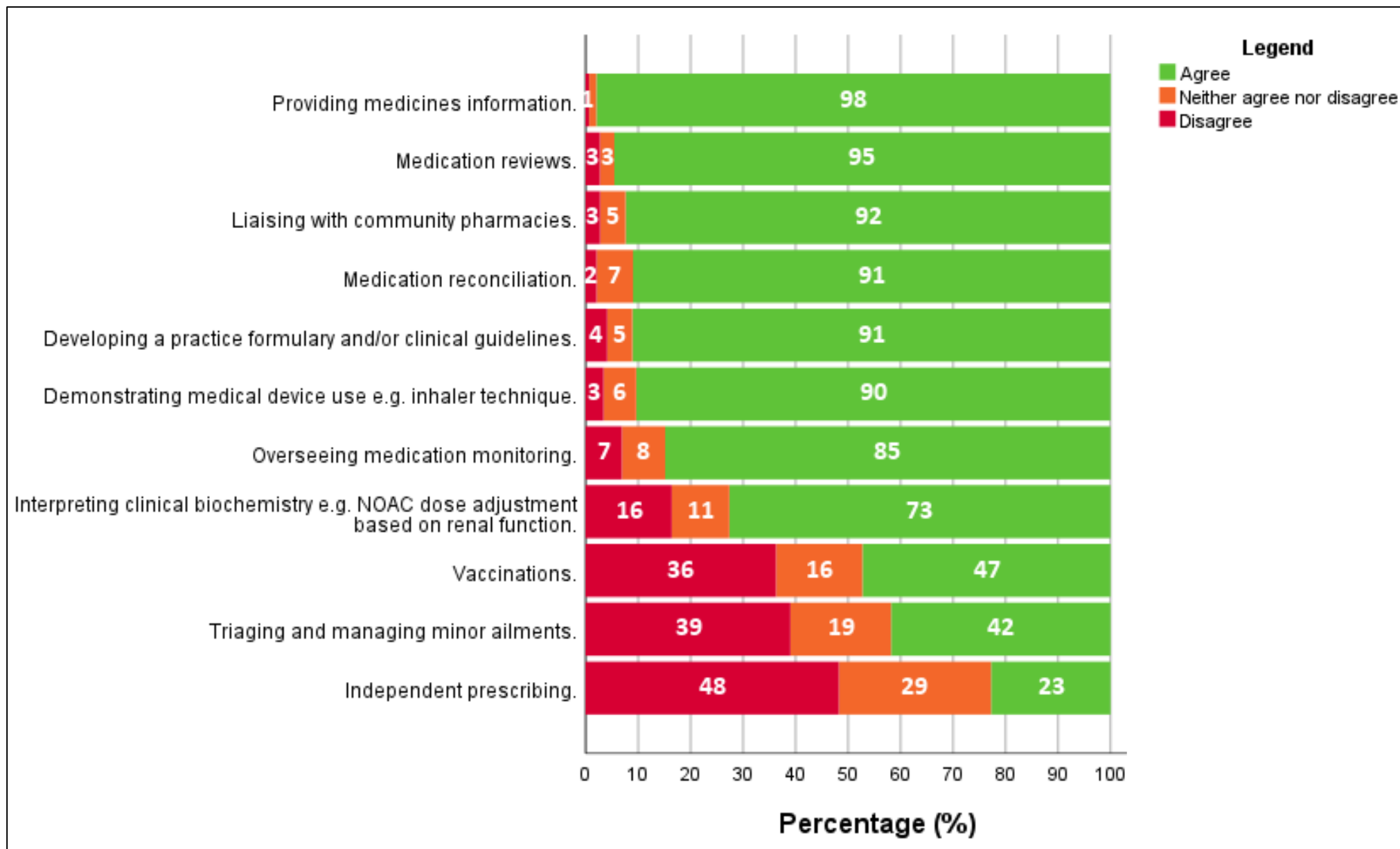
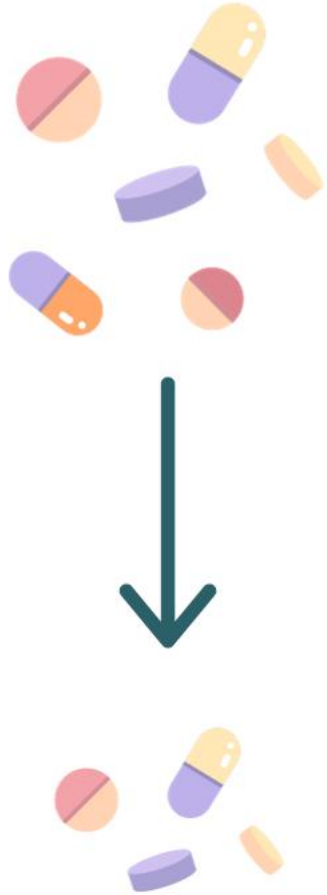






Figure 2. GPs acceptance of roles for pharmacists in general practices

Pharmacist-led medication reviews in GP practices - What did we find?



- 99 patients were reviewed in 5 GP practices by a pharmacist.
- Average number of medications per patient ↓ by 1.4 post reviews.
- There was a significant decrease in inappropriate medications, including sedative medications.
- There were no significant differences in quality of life, hospitalisations, A&E visits, and falls in the six months before and after the reviews.
- On average per patient time spent per patient:
 - Pharmacist = 35 minutes.
 - GPs = 3 minutes.

Table 1: Cost avoidance of pharmacist intervention

		Base case (Range)	
1. Cost avoidance		€61,336 (€2,985.71-€225,729)	Due to avoided adverse drug events e.g. a fall from a sedative medication
2. Cost of service		€ 2,589 (€988-€5,320)	
- Pharmacist wages		€2,292 (€822-€4,904)	Due to medications no longer prescribed (Cost and pharmacy dispensing fees)
- GP wages		€297 (€166-€416)	
3. Direct cost savings		€27,162	
4. Net cost benefit		€85,909 (€24,827-€251,903)	
5. Cost benefit ratio		33.2	

Implications for policy?

Potential for **larger scale integration** of practice pharmacists:

- Efficacious, safe, and cost effective.
- GPs and pharmacists willing and positive.
- Government funding likely needed.



Supports required for the **development of practice pharmacists' roles**:

- Legislating for pharmacist prescribing.
- Professional indemnification of pharmacists in practices.
- Space in purpose-built multidisciplinary primary care centres.



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