



Remote Pharmacist Services in Rural Family Health Teams

Newman P¹, Polyakova O¹, McDonald K¹, Dhaliwall S¹, Lamoure J¹

¹ Northwest Telepharmacy Solutions



Background

- Pharmacists in Family Health Teams (FHT) play an integral role in improving patient care by providing medication management, counselling and ensuring optimal medication use.
- In collaboration with patients and health care professionals, pharmacists optimize treatment plans, monitor therapies, educate patients on proper use of medications and help manage chronic disease to enhance health outcomes and improve patient safety.
- Although the involvement of pharmacists in FHT's has been increasing, there is a paucity of research available for pharmacists supporting FHT's in rural communities remotely.

Methods

Study Design

Prospective multicenter cohort study in four rural FHTs in Ontario, Canada

Objective

To quantify pharmacist activities associated time requirements for patient care provided by telepharmacists in remote FHTs.

Methods: Four FHT pharmacists documented the following for each remote FHT patient consult:

- Time requirements for patient specific tasks: appointment set up, interview preparation, patient interview, documentation, care provider communication and to schedule follow up visits.
- Time required for non-patient specific tasks (e.g. program administrative tasks)
- Number of identified drug therapy problems (DTP) per patient

Data Analysis: Central tendencies were reported for quantitative values and percentages for categorical variables. Inferential statistics were used to identify correlation.

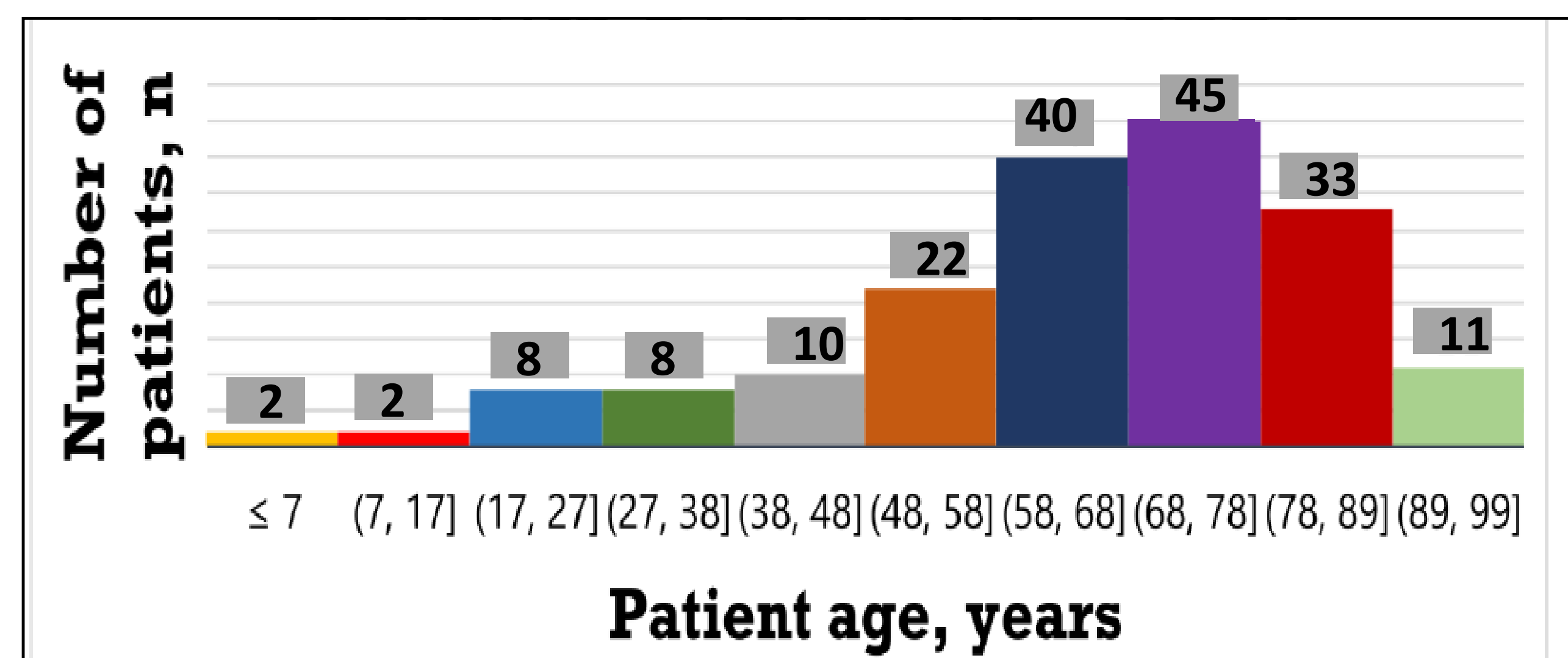
Participants: Adult patients of one of the four FHTs for whom a pharmacist medication review was requested by their respective FHT

Results

Five pharmacists, 181patient encounters who received 155 hours of pharmacist services in four FHTs from Sep 2023 to July 2024

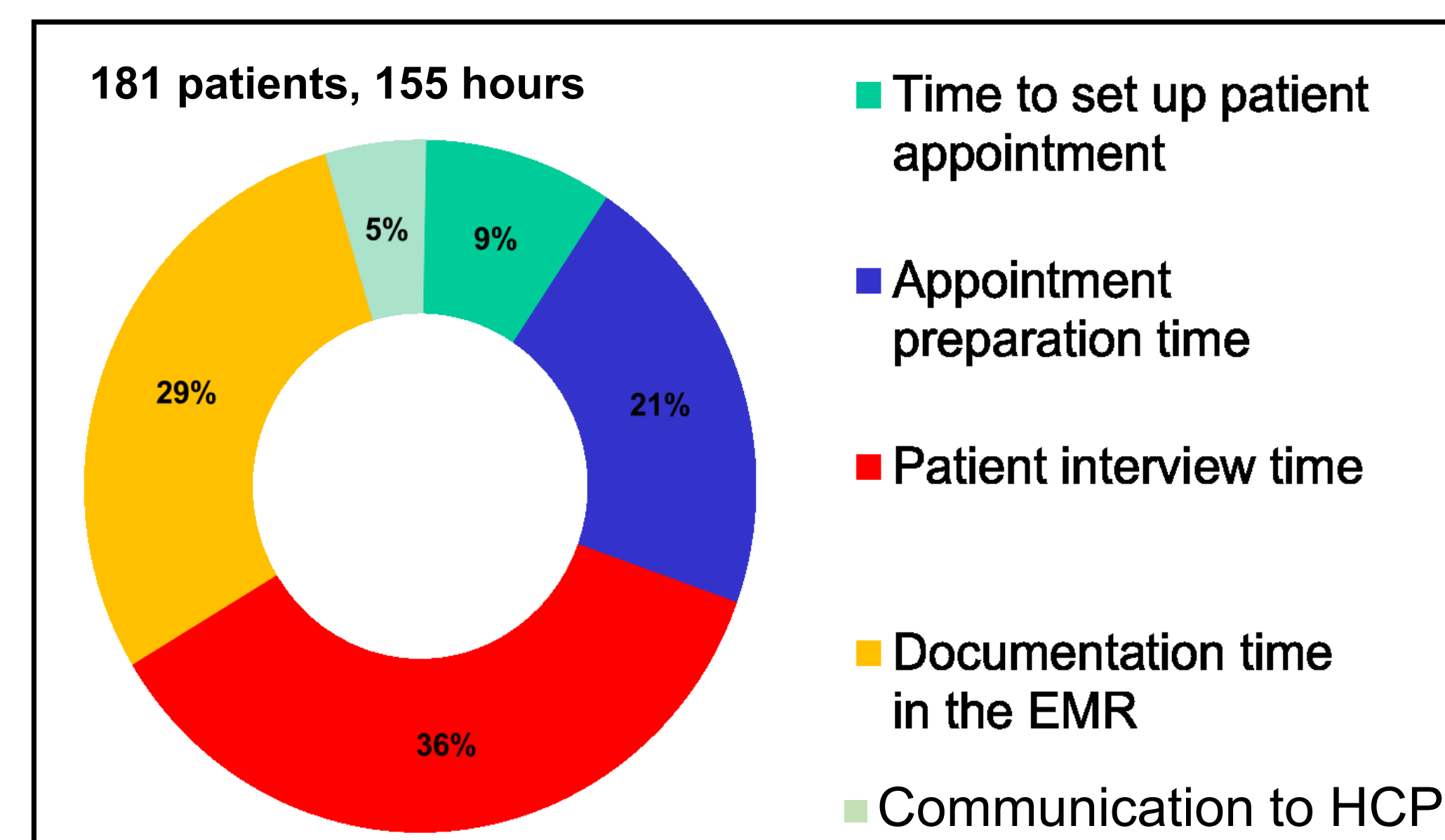
Results

Figure 1: Age distribution of Family Health Team patients who received remote pharmacist services (N=181)



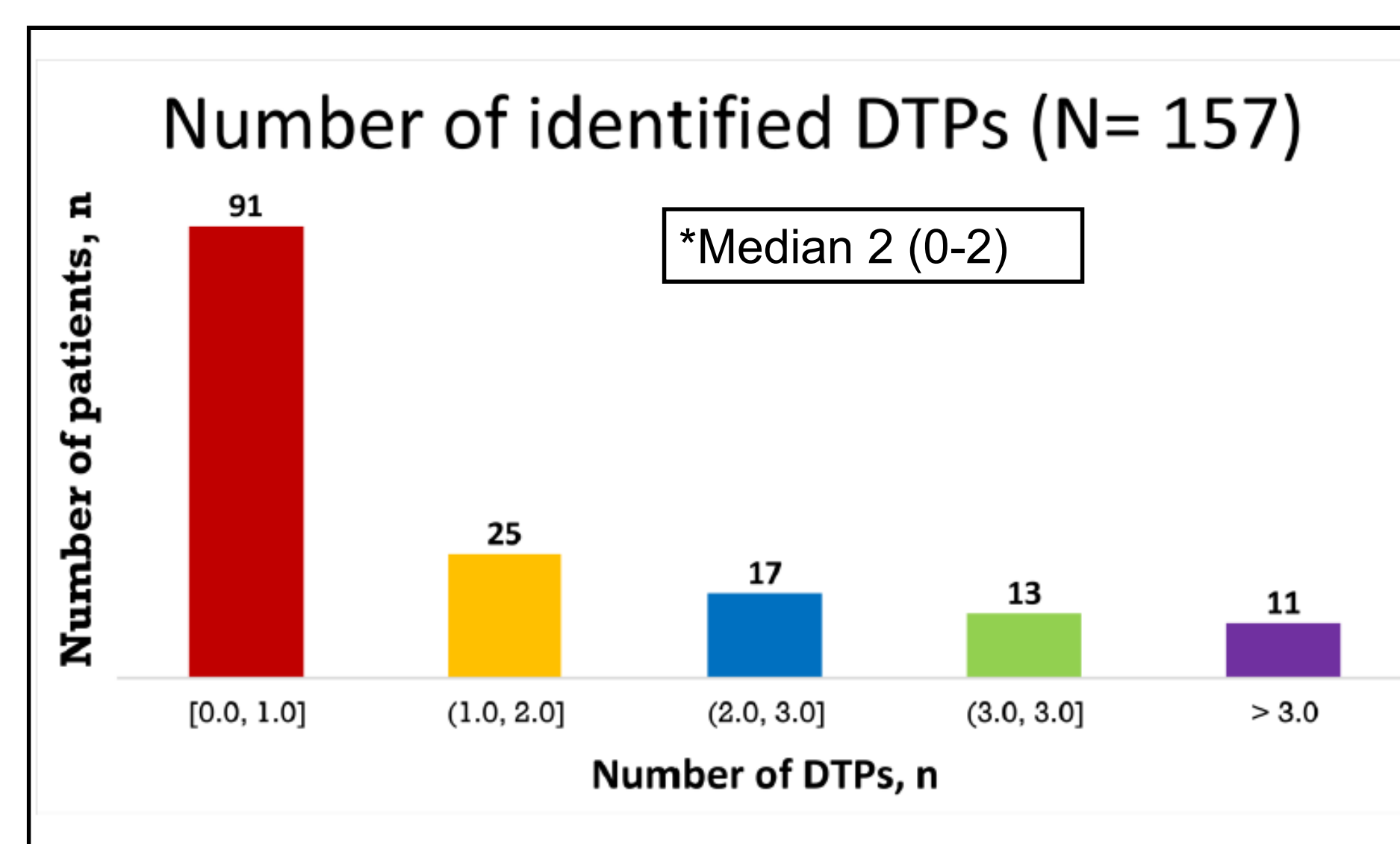
*The interquartile range (IQR) contains the second and third quartiles, or the middle half of the data set

Figure 2: Proportion of time spent on patient specific tasks



EMR- electronic medical record HCP- Health Care Provider

Figure 4: Number of drug therapy problems per patient



*The interquartile range (IQR) contains the second and third quartiles, or the middle half of the data set
DTP- Drug therapy problem



Website: northwesttelepharmacy.ca
Instagram: northwest_telepharmacy
Facebook: Northwest Telepharmacy Solutions
X: NWTelepharmacy
LinkedIn: Northwest Telepharmacy Solutions



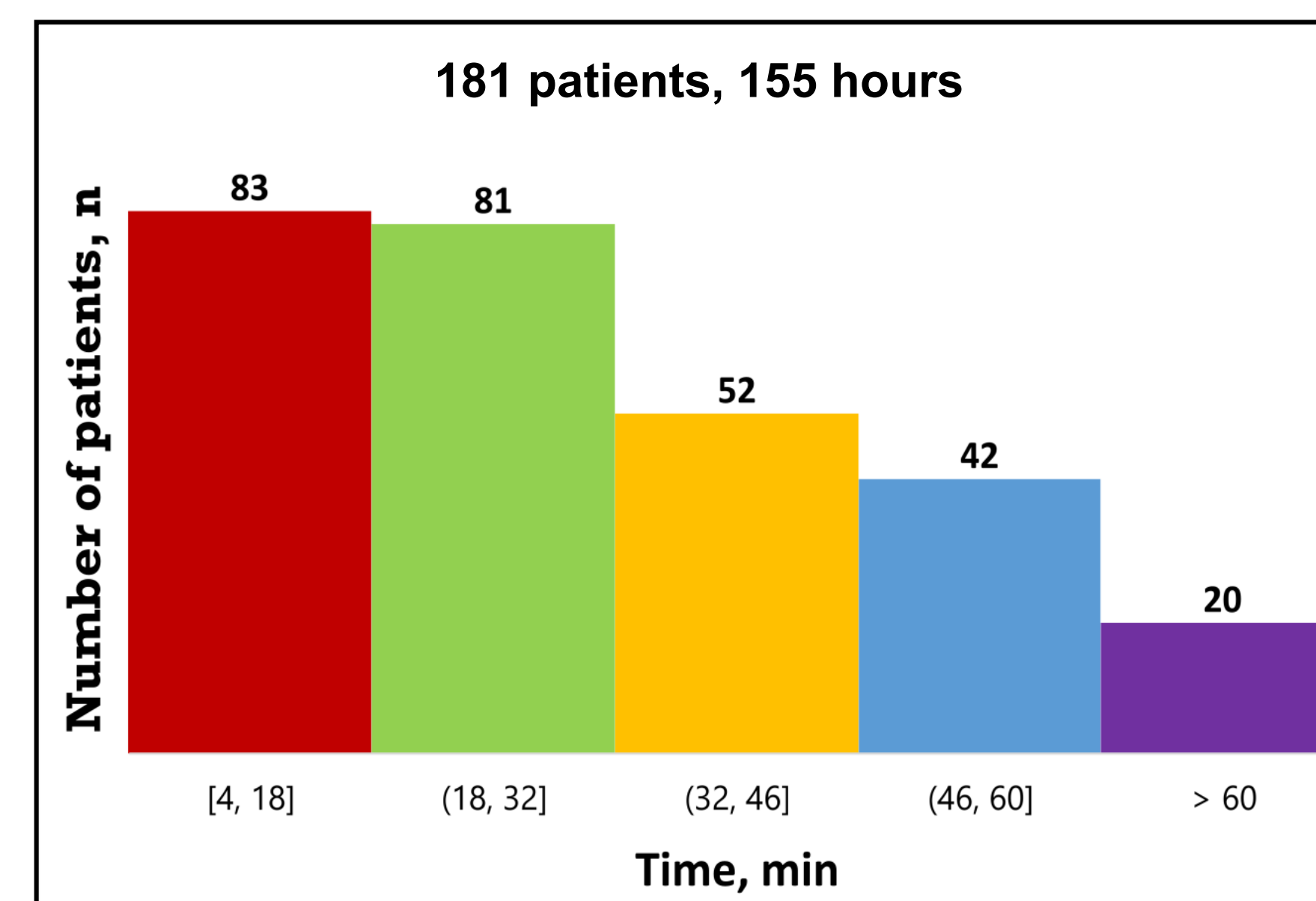
*Age
68 yr
(56-78)

*Time/patient
27 min
(15-43)

*DTP/patient
2
(0-2)

*Mean

Figure 3: Total time spent for patient specific activities, per patient



*The interquartile range (IQR) contains the second and third quartiles, or the middle half of the data set

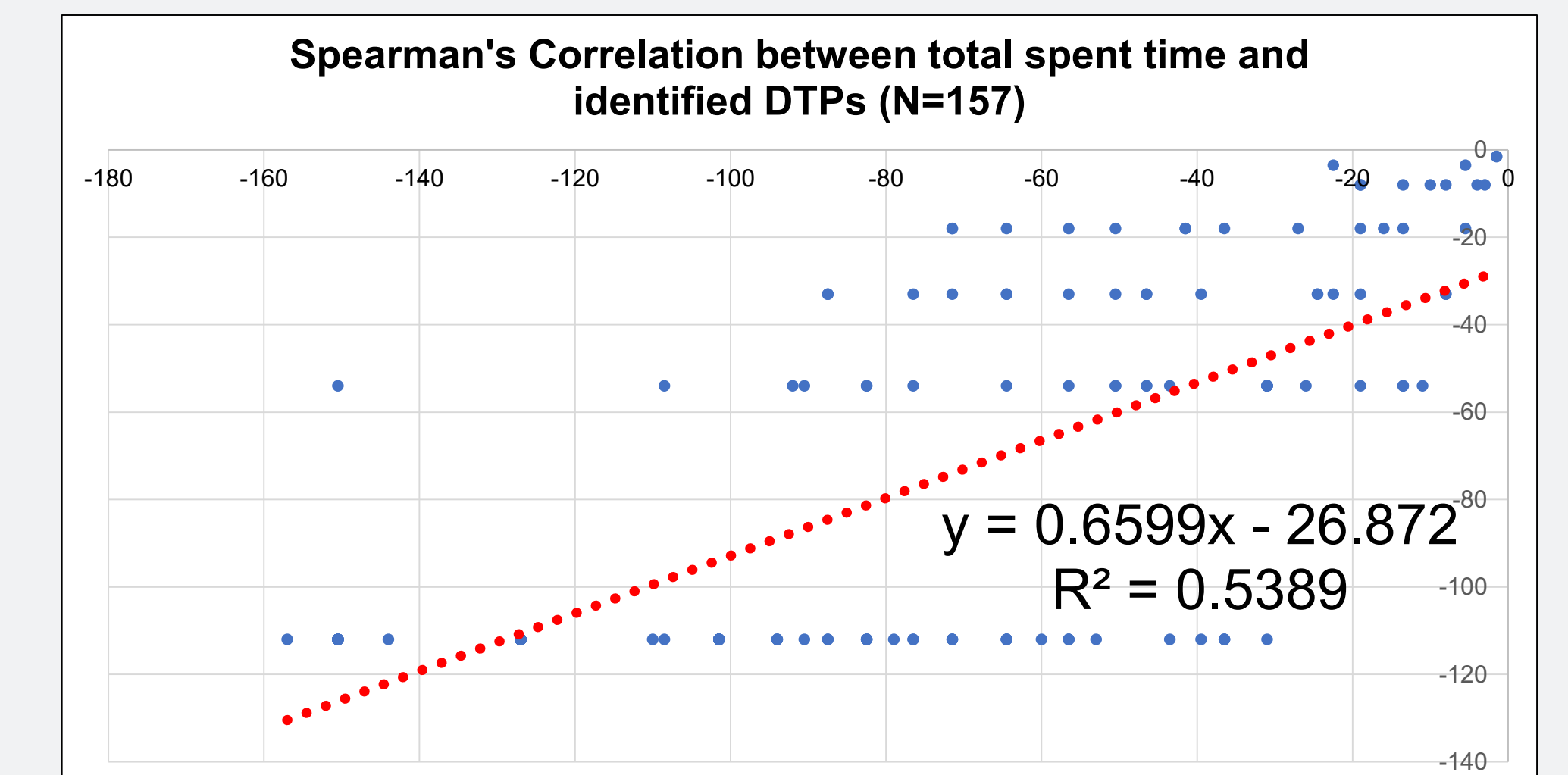
Table 2: Overall program task times n=155

| Task | Median Time (min) | IQR | Total time for all FHTs (hr) |
|---|-------------------|-----------|------------------------------|
| Patient Specific | | | |
| Appointment set up | 2 | (2-5) | 14 |
| Appointment preparation | 5 | (5-10) | 33 |
| Patient interview | 10 | (0-20) | 56 |
| Documentation in the health record | 10 | (5-10) | 45 |
| Communication with health care providers | 0 | (0-5) | 8 |
| *Non-patient specific tasks (one FHT only) | | | |
| | 15 | (15-18.5) | 4 |

*The interquartile range (IQR) contains the second and third quartiles, or the middle half of the data set

Results

Figure 5: Correlation between total time spent per patient and identified drug therapy problems (DTP)



Medium Correlation



Examples of Drug Related Problems

'65 F recent onset of urinary urgency and incontinence. Pharmacist medication review revealed recent addition of cetirizine for nasal allergy symptoms. Suggestion to hold cetirizine and/or change to a less anticholinergic agent such as loratadine, consider mirabegron and/or non-pharmacologic treatments for incontinence. All urinary issues resolved with discontinuation of cetirizine.'



Elderly patient post-op for hip fracture experiencing significant pain, not taking celecoxib due to prior advice to avoid due to being on chronic therapeutic anticoagulation. Oral anticoagulant had been held, and LMWH heparin had been prescribed post-op in addition to hydromorphone. The pharmacist suggested the patient take the celecoxib as prescribed by the surgeon until the oral anticoagulant was restarted. The pharmacist also took the opportunity to review the opioid therapy with the patient and the use of treatments to prevent and/or treat constipation.

Conclusions

his study provided valuable insight into the time required for remote pharmacists dedicated to FHT patient care activities to enhance our understanding of the resources required to support pharmacist involvement in individual FHTs serviced and across multiple teams. Further study is needed to establish which patients may benefit the most from remote pharmacist care in the community setting.

Disclosure Summary

Newman, P. Employed by Northwest Telepharmacy Solutions
Polyakova, O. Employed by Northwest Telepharmacy Solutions
Dhaliwall, S. Employed by Northwest Telepharmacy Solutions
McDonald, K. Director and investor in, Northwest Telepharmacy Solutions
Lamoure, J. Employed by Northwest Telepharmacy Solutions