

Integrating Clinical Pharmacy Into Daily Ward Operations: A Tailored Approach Across Specialties

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What was done? Why was it done?

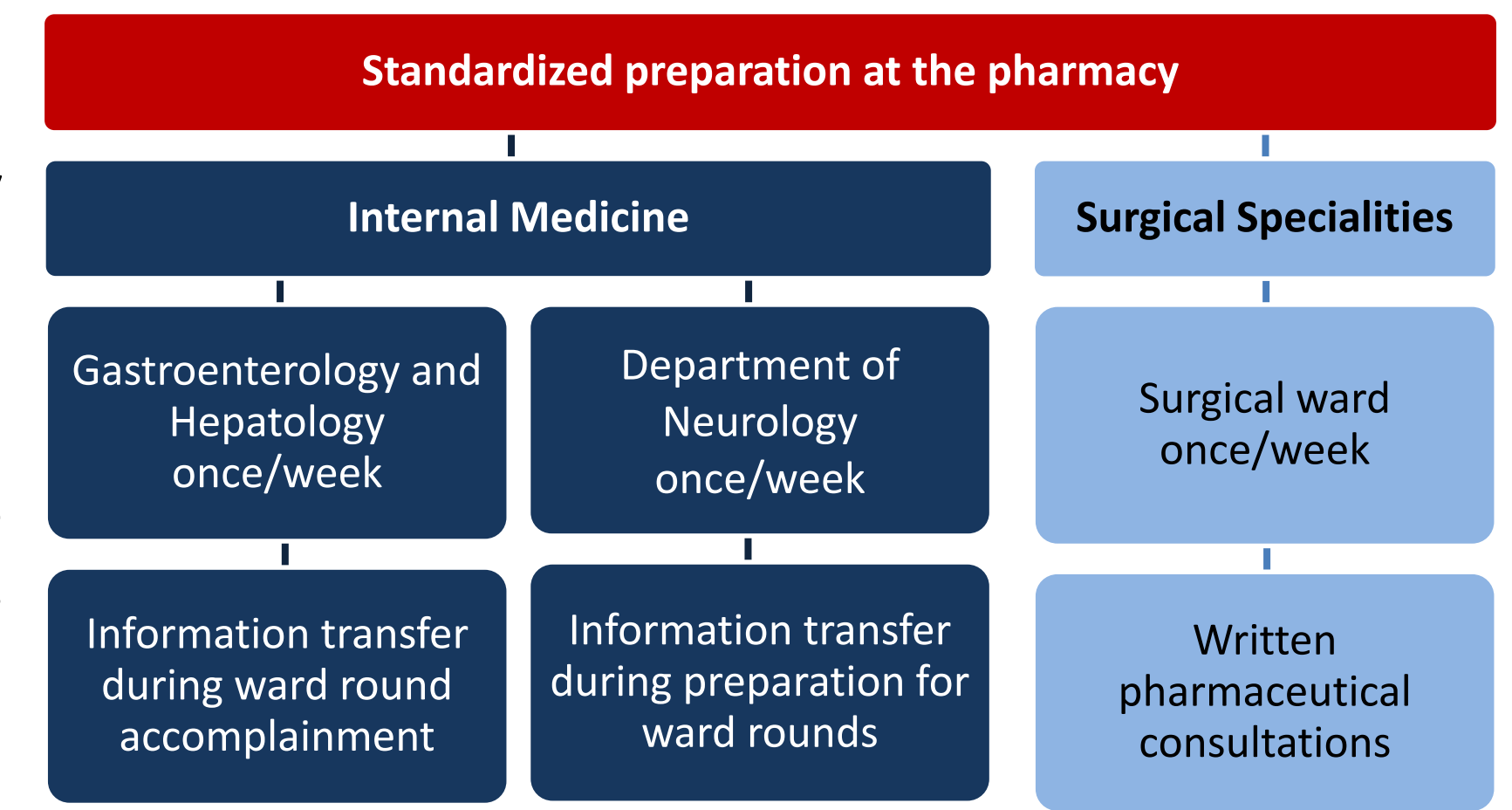
In Austria, the crucial role of clinical pharmacists is increasingly recognized, yet dedicated positions remain scarce. This study explores the optimal integration of clinical pharmacy services across medical fields.

Using data and experience from a comprehensive polypharmacy project, it retrospectively analyzes implementation strategies, comparing surgical and conservative settings while identifying key success factors and challenges.

How was it done?

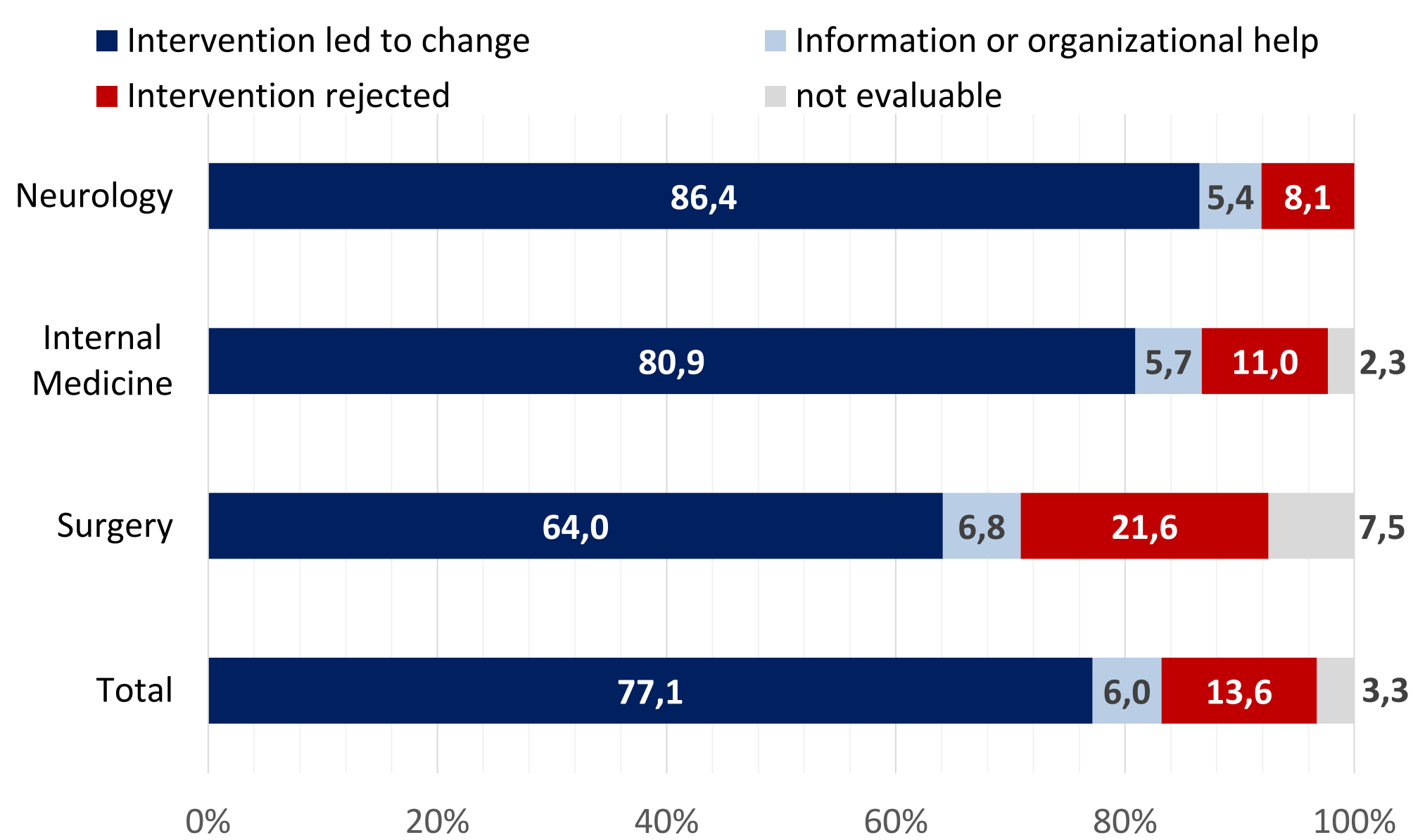
Three different wards were selected for the project. The established clinical pharmaceutical care of the Surgical Wards was expanded to include Neurology and Internal Medicine. Care was taken to involve both surgical and conservative specialties, as these differ significantly in their fields of activity, process flows, and experience with medication therapy.

Core aspects of the medication review included recording and evaluating the hospital medication, identifying drug-related problems (DRPs) and developing optimization proposals. Feedback to the physicians was provided in person and in writing, tailored to the specific requirements of each specialty. The outcome of a successful implementation was assessed using questionnaires administered to the physicians and the participating clinical pharmacist.



What has been achieved?

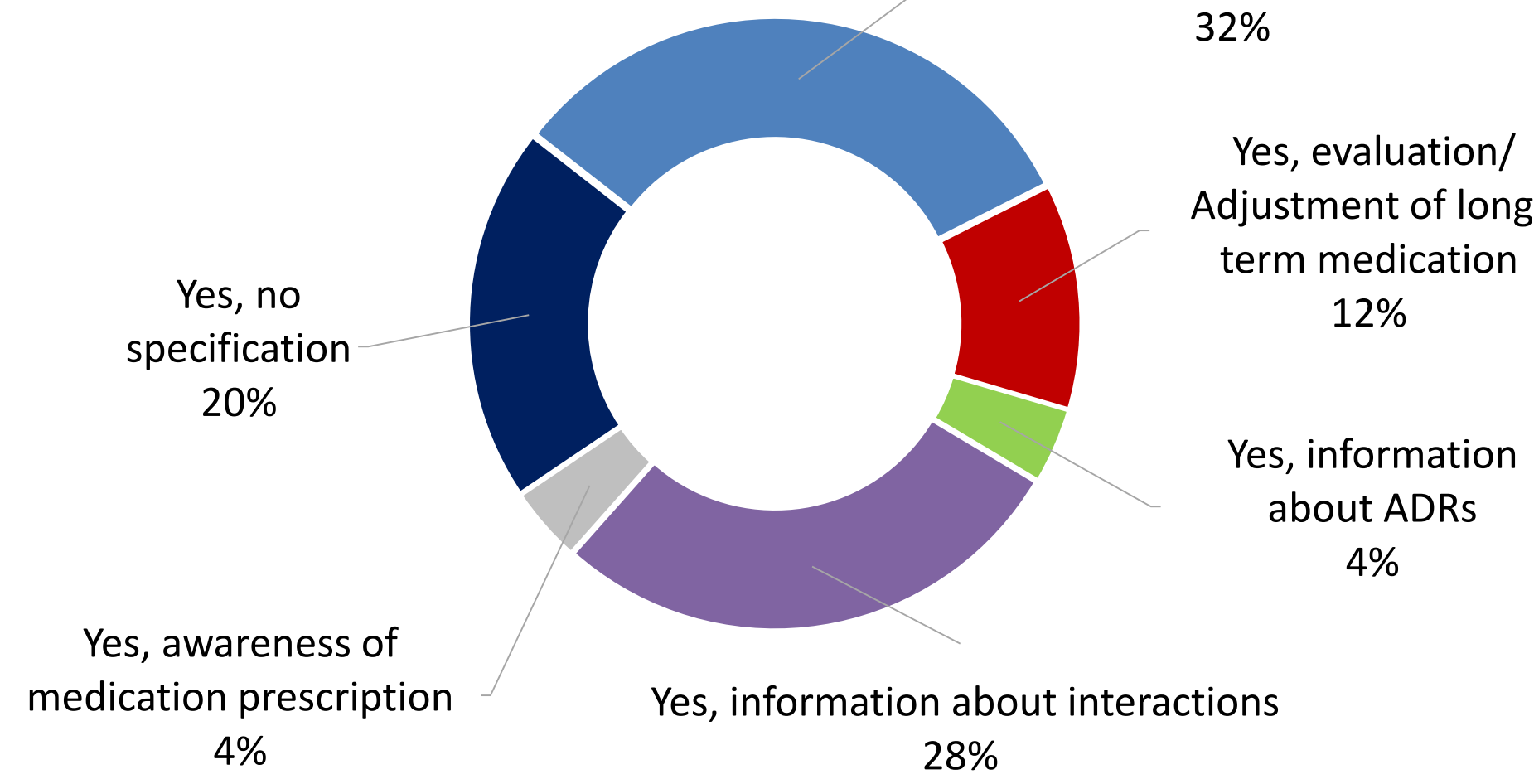
Implementation of the interventions



The implementation rate was 83.1% (77.1% for pharmaceutical recommendations and 6.0% for additional information). Only 13.6% of recommendations were rejected.

Physician Questionnaire - An excerpt

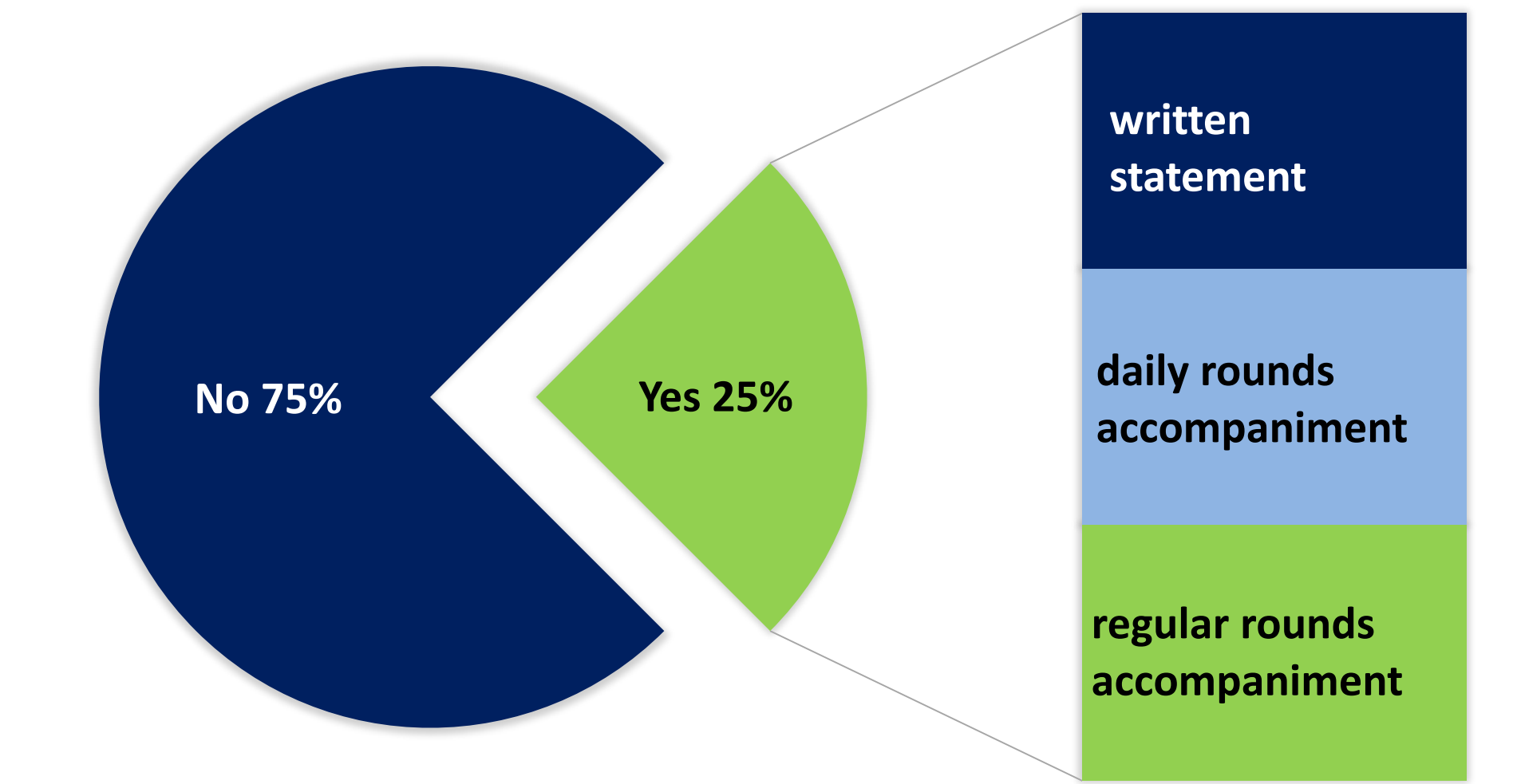
Did the project benefit you? If yes, which?



All physicians saw benefits for both themselves and their patients. The main advantages were knowledge gain and interdisciplinary exchange (32%), followed by information on interactions (28%).

Physician Questionnaire - An excerpt

Do you think improvements to the procedure implemented in this project would be beneficial? If yes, which?



25% identified potential for improvement and requested regular or daily ward rounds and written statements. Even this feedback can be viewed positively, as it reflects a desire for greater presence.

Recommendations on procedure and methodology

| Conservative Department Experts in drug therapy within the specific discipline | Surgical Specialist The specialty does not primarily focus on medication |
|--|---|
| Requirements for the clinical pharmacist | |
| Professional competence and teamwork skills; adherence to current discipline-specific guidelines | |
| A confident demeanor, tact, flexibility, and an open, friendly personality are advantageous | Introverted personalities can also contribute valuable input, as direct communication is not essential |
| Preparation in the pharmacy | |
| Review all patient-relevant parameters and medications; document abnormalities in laboratory results and record drug-related problems (DRPs) via Hospital Information System (HIS) | |
| Medication review on ward | |
| Conducting medication reviews; documenting identified DRPs Providing support to nursing staff with medication-related issues: availability/substitution, divisibility and dosage accuracy, preparation for use, infusion rate, and other considerations | |
| Information sharing | |
| Participation in the handover, round preparation or morning meeting | Written Pharmaceutical Recommendation (PR) |
| <ul style="list-style-type: none"> Highly appreciated by doctors Provides opportunities for discussion Ensures optimal use of time Minimizes inactive periods | <ul style="list-style-type: none"> Ensure well-structured and clearly formulated recommendations to be easily implementable Refer to possible consultation request from relevant specialist department Include options for forwarding the PR for further clarification in the extramural setting |
| Review of patient chats with accompaniment during rounds | Visit accompaniment: Focuses primarily on planning surgical procedures and wound care |
| <ul style="list-style-type: none"> Preferred by doctors Facilitates discourse Eases integration into the ward and familiarization with specialty areas Provides significant learning opportunities Time-intensive | <ul style="list-style-type: none"> May not be practical if there is a shortage of human resources Possibility of a short-term visit accompaniment to gain insight into ward procedures during the implementation phase |
| Time frame for the ward rounds | |
| <ul style="list-style-type: none"> Usually takes place in the morning Time flexibility not possible; the clinical pharmacist must comply with the wards schedule | <ul style="list-style-type: none"> Viewing patient charts is possible at any time, but in practice, consultation with the care team is necessary Surgeries are primarily performed in the morning, most patient charts will be available in the afternoon |
| Communication pathway | |
| <ul style="list-style-type: none"> Prefer personal communication Use written communication in the form of PR if necessary | <ul style="list-style-type: none"> Provide written PR Consider additional personal contact if a physician is available on site |

| Conservative Department | Surgical Specialist |
|--|---|
| Clinical pharmacist with no prior experience | |
| On-the-job training is essential for integrating new pharmacists into the field of clinical pharmacy. Initially, a 'shadowing' period is beneficial, during which the inexperienced pharmacist observes and accompanies an experienced clinical pharmacist (CP), receiving close supervision and training. Duration of the shadowing period can be adjusted based on the new pharmacist's existing skills and knowledge. This ensures insight into work processes, procedures, and challenges is gained. | |
| <ul style="list-style-type: none"> Aim to participate in morning meetings, handovers and round preparations Participation in ward rounds is crucial for understanding the ward's processes and the key areas of specialization | <ul style="list-style-type: none"> Involve less face-to-face interaction with physicians and can be preferred for newcomers to clinical pharmacy due to the increased time and opportunity for research Consider round accompaniment in the beginning to facilitate integration, build relationships, and gain insight into processes |
| Limiting factors and obstacles | |
| <ul style="list-style-type: none"> Lack of continuous support during sick leave and vacation periods Inadequate intensive support during the training of new clinical pharmacists Absence of standardized service protocols and minimum standards Requirement for cooperation from doctors and nursing staff Perception of clinical pharmacists as a control entity due to their limited presence Insufficient specialist knowledge among clinical pharmacists Inability to view all medication data via HIS necessitates long distances Fewer charts are not always available on the ward | |

What is next?

It has been demonstrated that a 'one-size-fits-all' approach is not practical. Processes need to be adapted and evaluated based on specific ward conditions. Expanding clinical pharmacy services requires understanding the unique structures and routines of each department. Clear communication with ward staff is essential, and methods should be periodically evaluated and adjusted. An optimized electronic chart can improve quality, efficiency, and time management, supporting the extension of clinical pharmacy services.

This initiative should be considered an example of good practice due to its strategic approach to integrating clinical pharmacy services in a resource-limited environment. The project's success underscores the importance of flexibility and continuous improvement in clinical pharmaceutical practices.

Key factors for the successful implementation and nationwide rollout of clinical pharmacy include:

- Continuity
- Effective communication and visibility
- Opportunities for specialization
- Integration into quality management
- Economic potential
- Computerized Physician Order Entry (CPOE)

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