Quality of Information for Pruritus Research through Single Source

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Quality of Information for Pruritus Research through Single Source

INTRODUCTION
Single Source = Reusing EHR Data

Prerequisites to reuse data from electronic health records for clinical research databases to increase data quality:

• Standardize medical documentation
• Efficient data transfer
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METHODS
Documentation & Workflow Analysis

Competence Center for Chronic Pruritus, University Hospital Münster

• Collection of routine and research documentation
• Consensus process with medical experts for standard data set
• Event/driven process chains for workflow representation

• Data collection through clinical information system, web-based patient questionnaire system and x4T-server*

RESULTS

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Used Documents

Up to 200 patient visits per month.

Most forms for the first encounter and any follow-up visit are the same.

Data is collected through a medical history form (physician-based) and through questionnaires (patient-based).

<table>
<thead>
<tr>
<th>Form Name</th>
<th>First encounter</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Medical History</td>
<td>X</td>
<td>--</td>
</tr>
<tr>
<td>Follow-Up Medical History</td>
<td>--</td>
<td>X</td>
</tr>
<tr>
<td>Patient Questionnaire: Neuro-Derm</td>
<td>X</td>
<td>--</td>
</tr>
<tr>
<td>Patient Questionnaire: Dermatology Life Quality Index</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Patient Questionnaire: Hospital Anxiety &amp; Depression Scale</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Patient Questionnaire: Pruritus Intensity</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Paper-based vs. Electronic Workflow

Patient appointment → Pruritus data form → Anamnesis

First Follow-up

Completion of paperbased database form → Pruritus data form

Further Follow-up

Manual data transfer into database → Printed summary sheet

Manual update on summary sheet → Updated summary sheet

Updated summary sheet → Manual database update → End of data transfer

End of data transfer

Pruritus data form

Neuro-Derm

Printed summary sheet

First encounter or Follow-up

First encounter → Follow-up

Check data & Selection of patients for database & data transfer

Automatic update summary sheet → End of data transfer

x4T-DB

EHR

Manual data transfer

Neuro-Derm

EHR

EHR

x4T-DB

EHR

Automatic update summary sheet

End of data transfer
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DISCUSSION & FUTURE RESEARCH
Towards a Pruritus Register

Potential advantages of electronic workflow
• Saves manual data entry time
• Reduces transcription errors
• Ensures timely data entry and availability for research

Challenges
• Standardisation across different study sites
Thank you for your attention.

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