### A. About your work position

Clinical position:  
- [ ] Intern  
- [ ] Resident  
- [ ] Consulting physician

### B. About your experience with computers

1. Do you own a computer?  
   - [ ] Yes  
   - [ ] No

2. How many fingers do you use when typing?  
   - [ ] Two  
   - [ ] Three or more  
   - [ ] All (or touch)

3. Have you earlier* used a computer for  
   a) Test result retrieval  
   - [ ] Yes  
   - [ ] No  
   b) Literature search  
   - [ ] Yes  
   - [ ] No  
   c) Word processing  
   - [ ] Yes  
   - [ ] No  
   d) Entering patient info (e.g. an outpatient note)  
   - [ ] Yes  
   - [ ] No  
   e) Retrieving patient info (e.g. a previous discharge report)  
   - [ ] Yes  
   - [ ] No

4. In the past*, what is the most frequent you used a computer?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily

5a. How would you rate your computer skills in general?  
   - Lowest  
   - Average  
   - Highest

5b. How would you rate your computer skills concerning DIPS?  
   - Least  
   - Average  
   - Highest

*Before DIPS was installed, or before you started working in the hospital*

### C. About the availability of computers at your working place at the hospital

1. Do you have a computer in your office?  
   - [ ] Yes  
   - [ ] No

2. About the computers installed in the ward, at the outpatient clinic offices, investigation rooms, etc: How often are you prevented from or delayed in using them because others are using them?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily

3. How often do you miss having a computer available where you do patient-related work?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily

4. How often are you prevented from or delayed in using a computer due to computer errors, system crashes or other machine-related problems?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily

5. How often are you prevented from or delayed in using a computer due to password problems?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily

6. How often are you prevented from or delayed in using a computer because the system is working too slowly?  
   - Never  
   - Less frequently than monthly  
   - Monthly  
   - Weekly  
   - Daily
D. About your use of DIPS for clinical tasks in the hospital

At Aust-Agder Hospital an electronic medical record (DIPS 2000) is installed, consisting of "purely" electronic data and scanned paper records. The latter contains mainly older documents from the patient record, but also some newer information (external lab tests, referrals, etc.) Since the part of DIPS handling the scanned information differs so much from the rest of the system, we are keeping it separate in this questionnaire.

D1. When you expect to find the information in the scanned part of DIPS, how often do you use it for the following tasks:

1. Review the patient’s problems
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

2. Seek out specific information from patient records
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

3. Follow the results of a particular test or investigation over time
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

4. Obtain the results from clinical biochemical laboratory analyses
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

5. Obtain the results from X-ray, ultrasound or CT investigations
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

6. Obtain the results from other supplementary investigations
   a. from documents scanned in sections (“bulk”)
   b. from documents scanned one sheet at a time

7. Obtain the results from new tests or investigations
   (always scanned on sheet at time)
D2. The scanned document images notwithstanding, how often do you use DIPS to assist you with the following tasks:

<table>
<thead>
<tr>
<th>Task</th>
<th>Never/ almost never</th>
<th>Seldom</th>
<th>About half of the occasions</th>
<th>Most of the occasions</th>
<th>Always/ almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Review the patient’s problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 Seek out specific information from patient records</td>
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<tr>
<td>3 Follow the results of a particular test or investigation over time</td>
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<tr>
<td>4 Obtain the results from new tests or investigations</td>
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<tr>
<td>5 Enter daily notes</td>
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<tr>
<td>6 Produce data reviews for specific patient groups, e.g. complication rate, distribution of diagnoses.</td>
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<tr>
<td>7 Order clinical biochemical laboratory analyses</td>
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<tr>
<td>8 Obtain the results from clinical biochemical laboratory analyses</td>
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<tr>
<td>9 Obtain the results from X-ray, ultrasound or CT investigations</td>
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<tr>
<td>10 Obtain the results from other supplementary investigations</td>
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<tr>
<td>11 Refer the patient to other departments or specialists</td>
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<tr>
<td>12 Write prescriptions</td>
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<tr>
<td>13 Complete sick-leave forms</td>
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<tr>
<td>14 Collect patient information for various medical declarations</td>
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<tr>
<td>15 Give written individual information to patients, e.g. about medications, disease status</td>
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<tr>
<td>16 Give written general medical information to patients</td>
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<tr>
<td>17 Collect patient info for discharge reports</td>
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<td>18 Check and sign typed dictations</td>
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<tr>
<td>19 Register codes for diagnosis or performed procedures</td>
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<tr>
<td>20 Other (please specify)</td>
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</tbody>
</table>
E1. About your satisfaction with DIPS, the part handling the scanned paper records

Here we would like to learn your opinion of the part of DIPS handling the scanned paper records

1 Content
   a How often does the system provide the precise information you need?
   b How often does the information content meet your needs?
   c How often does the system provide reports\(^1\) that seem to be just about exactly what you need?
   d How often does the system provide sufficient information?

2 Accuracy\(^2\)
   a How often is the system accurate?
   b How often are you satisfied with the accuracy of the system?

3 Format
   a How often do you think the output is presented in a useful format?
   b How often is the information clear?

4 Ease of use
   a How often is the system user-friendly?
   b How often is the system easy to use?

5 Timeliness
   a How often do you get the information you need in time?
   b How often does the system provide up-to-date information?

---

1 "Report" may be interpreted as a selection or resume of information shown on the screen or printed.
2 E.g. that correct journal, patient and document type is displayed; that the information (e.g. blood pressure) is presented having the right name; that the values are correct, etc.
E2. About your satisfaction with DIPS, the part handling the regular electronic data

Here we would like to learn your opinion of DIPS, regardless of the part handling the scanned paper records

1 Content
   a How often does the system provide the precise information you need?
   b How often does the information content meet your needs?
   c How often does the system provide reports that seem to be just about exactly what you need?
   d How often does the system provide sufficient information?

2 Accuracy
   a How often is the system accurate?
   b How often are you satisfied with the accuracy of the system?

3 Format
   a How often do you think the output is presented in a useful format?
   b How often is the information clear?

4 Ease of use
   a How often is the system user-friendly?
   b How often is the system easy to use?

5 Timeliness
   a How often do you get the information you need in time?
   b How often does the system provide up-to-date information?

1 E.g. that correct journal, patient and document type is displayed; that the information (e.g. blood pressure) is presented having the right name; that the values are correct, etc.
F. In your opinion, how has DIPS changed the performance of the following tasks in your department:

<table>
<thead>
<tr>
<th>Task</th>
<th>Significantly more difficult</th>
<th>More difficult</th>
<th>Slightly more difficult</th>
<th>No change</th>
<th>Slightly easier</th>
<th>Easier</th>
<th>Significantly easier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 To review the patient’s problems has become</td>
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<td>12 To write prescriptions has become</td>
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</tbody>
</table>
G. Global assessment of DIPS

1 All considered, to what extent has DIPS changed these two aspects of your own department?

<table>
<thead>
<tr>
<th></th>
<th>Significantly more difficult</th>
<th>More difficult</th>
<th>Slightly more difficult</th>
<th>No change</th>
<th>Slightly easier</th>
<th>Easier</th>
<th>Significantly easier</th>
</tr>
</thead>
<tbody>
<tr>
<td>a The performance of our department’s work has become</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b The quality of our department’s work has become</td>
<td>□</td>
<td>□</td>
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<td>□</td>
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</tr>
</tbody>
</table>

2 How much do you agree with the following statement:
DIPS is worth the time and effort required to use it

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly disagree</th>
<th>Neutral</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

3 All considered, how would you rate your satisfaction with DIPS in your department?

<table>
<thead>
<tr>
<th></th>
<th>non-existent</th>
<th>poor</th>
<th>fair</th>
<th>good</th>
<th>excellent</th>
</tr>
</thead>
<tbody>
<tr>
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<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

4 All considered, how would you rate the success of DIPS in your department?

<table>
<thead>
<tr>
<th></th>
<th>non-existent</th>
<th>poor</th>
<th>fair</th>
<th>good</th>
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<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

H. Comments

In your opinion, are any of the functions in DIPS particularly useful? If so, please explain
In your opinion, are any of the functions in DIPS not very useful? If so, please explain

Do you miss any functionality in DIPS? If so, please explain

Were parts of the questionnaire unclear or ambiguous? Other comments?