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# Doctors

Check like this:   
not like this:

## 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 Yes No
- |                                                               |                          |                          |
|---------------------------------------------------------------|--------------------------|--------------------------|
| a) Test result retrieval                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Literature search                                          | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Word processing                                            | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Entering patient info (e.g. an outpatient note)            | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Retrieving patient info (e.g. a previous discharge report) | <input type="checkbox"/> | <input type="checkbox"/> |
- 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?

\* 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?
- 4 How often are you prevented from or delayed in using a computer due to computer errors, system crashes or other machine-related problems?
- 5 How often are you prevented from or delayed in using a computer due to password problems?
- 6 How often are you prevented from or delayed in using a computer because the system is working too slowly?

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**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.) Because 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:**

	Never/ almost never	Seldom	About half of the occasions	Most of the occasions	Always/ almost always
1 Review the patient's problems					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Seek out specific information from patient records					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Follow the results of a particular test or investigation over time					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Obtain the results from clinical biochemical laboratory analyses					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Obtain the results from X-ray, ultrasound or CT investigations					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Obtain the results from other supplementary investigations					
a. from documents scanned in sections ("bulk")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. from documents scanned one sheet at a time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Obtain the results from new tests or investigations (always scanned on sheet at time)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**D2. The scanned document images notwithstanding, how often do you use DIPS to assist you with the following tasks:**

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

**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

	Never/ almost never	Seldom	About half of the time	Most of the time	Always/ almost always
<b>1 Content</b>					
a How often does the system provide the precise information you need?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often does the information content meet your needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c How often does the system provide reports <sup>1</sup> that seem to be just about exactly what you need?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d How often does the system provide sufficient information?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Accuracy<sup>2</sup></b>					
a How often is the system accurate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often are you satisfied with the accuracy of the system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Format</b>					
a How often do you think the output is presented in a useful format?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often is the information clear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Ease of use</b>					
a How often is the system user-friendly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often is the system easy to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Timeliness</b>					
a How often do you get the information you need in time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often does the system provide up-to-date information?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> "Report" may be interpreted as a selection or resume of information shown on the screen or printed

<sup>2</sup> E.g. that correct journal, patient and document type is displayed; that the information (e.g. blod pressure) is presented having the right name; that the values are correct, etc.

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## E1. 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**

	Never/ almost never	Seldom	About half of the time	Most of the time	Always/ almost always
<b>1 Content</b>					
a How often does the system provide the precise information you need?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often does the information content meet your needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c How often does the system provide reports that seem to be just about exactly what you need?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d How often does the system provide sufficient information?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Accuracy <sup>1</sup></b>					
a How often is the system accurate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often are you satisfied with the accuracy of the system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Format</b>					
a How often do you think the output is presented in a useful format?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often is the information clear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Ease of use</b>					
a How often is the system user-friendly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often is the system easy to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Timeliness</b>					
a How often do you get the information you need in time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b How often does the system provide up-to-date information?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> E.g. that correct journal, patient and document type is displayed; that the information (e.g. blod pressure) is presented having the right name; that the values are correct, etc.

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**F. In your opinion, how has DIPS changed the performance of the following tasks in your department:**

	Significantly more difficult	More difficult	Slightly more difficult	No change	Slightly easier	Easier	Signifi- cantly easier
1 To review the patient's problems has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 To seek out specific information from patient records has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 To follow the results of a particular test or investigation over time has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 To obtain the results from new tests or investigations has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 To enter daily notes has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 To produce data reviews for specific patient groups (eg. complication rate) has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 To order clinical biochemical laboratory analyses has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 To obtain the results from clinical biochemical laboratory analyses has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 To obtain the results from X-ray, ultrasound or CT investigations has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 To obtain the results from other supplementary investigations has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 To refer the patient to other departments or specialists has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 To write prescriptions has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 To complete sick-leave forms has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 To collect patient information for various medical declarations has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 To give written individual information to patients, (e.g. about medications, disease status) has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 To give written general medical information to patients has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 To collect patient info for discharge reports has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 To check and sign typed dictations has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 The register codes for diagnosis or performed procedures has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## G. Global assessment of DIPS

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

	Significantly more difficult	More difficult	Slightly more difficult	No change	Slightly easier	Easier	Significantly easier
a The performance of our department's work has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Significantly decreased	Decreased	Slightly decreased	No change	Slightly increased	Increased	Significantly increased
b The quality of our department's work has become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 How much do you agree with the following statement:

DIPS is worth the time and effort required to use it

Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

non-existent	poor	fair	good	excellent
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

non-existent	poor	fair	good	excellent
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 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?