Diverse activity-based management tools: process of harmonization

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Overview

● Context
● Process
● Impact
● Next steps
● Conclusion
Duties of Technical Agency for Information on Hospital Care (ATIH):

- The last few years: PMSI data quality has been improved → health actors started to use it to manage and finance the hospitals
- Diverse actors and institutions developed activity-based management tools
3 main ABM tools for the regional agencies to analyze hospital activity

Server of PMSI databases

Web platform On-line dashboards

online analytical processing “cubes”
3 main ABM tools for the regional agencies to analyze hospital activity

- **Server of PMSI databases (ATIH)**
  - Software queries on the native database
- **“ScanSanté platform” (ATIH)**
  - All-in one tool
  - Displays pre-calculated key indicators via online dashboards
  - A wide range of data in open-access and a part in restricted access
- **“DIAMANT” (ARS)**
  - Provides key indicators using OLAP (online analytical processing) cubes technology; allowing the users to cross numerous variables
  - Access restricted
  - Most recent tool
Activity-based management tools

- Online dashboards (ScanSante webplatform)
- OLAP cubes (Diamant)
- Server of PMSI databases

Complexity: Low skills
Flexibility: High skills

Number of users targetted: +
Skills: + -
Why to harmonize?

Program for Medicalization of Information Systems (PMSI)

Data provided by ATIH

Key indicators

Several identical indicators but with different results 😞
→ Necessity to harmonize the calculation
A national plan to harmonize both tools has been launched by the Ministry of Health

First step concerns psychiatry:
- Psychiatrics data is complex: ATIH has worked with experts to develop dashboards and benchmark tools since 6 years
- Diamant needed ATIH’s expertise to improve its data quality

Set up of a working group to review the indicators with experts:
- On psychiatrics data
- With an in-depth knowledge of both tools

Psychiatric indicators displayed from both tools were listed by the tools’ managers
Process

36 ind. + axis of analysis
16 ind.
288 ind. (incl. +/- axis of analysis)

Harmonization

For each indicator → Technical sheet to explain:
• calculation
• bias
• interpretation’s limits

Review & discussion by the experts of the working group

Validation by an extended group of experts + Ministry + heads of projects
<table>
<thead>
<tr>
<th>CODE ID</th>
<th>INDIC_0007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Full-time days of hospitalization</td>
</tr>
<tr>
<td>Definition</td>
<td>Nombre de journées de présence des patients à temps complet</td>
</tr>
</tbody>
</table>
| Producer | DIAMANT cube PSY  
ScanSanté : RME-Psy (D. par établissement / D. agrégées); analyse croisée consommation / production; cartographie consommation / production; activité par nature de prise en charge; activité infra-annuelle; synthèse nationale |
| Data source | RIM-P (RPSA) |
| Access | DIAMANT : Avoir un accès DIAMANT  
ScanSanté : Libre ou Identifiant pour les profils national, régional et établissement |
| Confidentiality | DIAMANT : Organisme habilité à utiliser DIAMANT  
ScanSanté : Ouvert ou Accès sous identifiants (sauf données de synthèse, en libre accès) |
| Period | 5 années glissantes |
| Update frequency | DIAMANT : mensuel  
ScanSanté : annuel, sauf activité infra-annuelle qui est hebdomadaire |

**INDICATOR AXIS**

| Care consumption or production | Production et consommation de soins |
| Analysis axis | Forme d’activité | Temps complet 01 à 07  
Exclusion de : Formes d’activité différentes de 01 à 07 ; inconnu ; non renseigné |
| Type of care | PSY |
| Financing | DAF / OGN |

**Geographical axis**

| Production | CONSOMMATION :  
Région du patient  
Département du patient  
Territoire de santé du patient  
code GEO PMSI du patient |
| MODALITÉS DE FINANCEMENT | DAF ; OGN ; non renseigné |
| Type d’établissement dans ScanSanté Activité :  
Public ; PSPH ; Privés OGN  
Statut juridique dans ScanSanté RPM ;  
|
Impact

Finally, the harmonization will mainly concern:

- Calculation:
  - Indicators provided by the ScanSanté in psychiatry had been set up in a working group of expert
    ➔ share of ATIH’s expertise / Adjustment on ScanSanté’s indicators
  - Names: same indicator / same name

- Implementation:
  - Evaluation of the workload for each technical team
    ➔ ending planed in 2018
  - Postponement of few changes concerning more than psychiotics indicators ➔ until the end of the process regarding all types of care (acute care…)

Next steps

- Harmonization for acute care indicators is on its way
- Next steps will concern:
  - Rehabilitation care
  - Home care
  - Funding
  - Human resources
- A strategy to keep up to date the harmonization work is in thought
Conclusion

- Harmonization between tools is essential for users:
  - How can they understand that similar indicators give different results?
  - To assure the reproducibility of the results
  - To allow benchmark from results providing by different tools
- Indicators included in a new ABM tool should be consistent with the pre-existing ones or differences should be clear
- Users should be:
  - informed about the calculation, the bias and the limits of each indicator → be transparent
  - guided for the analysis of data displayed
Thanks for your attention

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