Improving access to quality health care for refugees and rural populations with a Digital solution in Chad

User satisfaction with a digital health tool in Chad

Monique Léchenne[1,2], Alladiguimbai Montolnan[3], Ngaradoumadji Madjiyangué[3], Yannick Toubangué[3], Marco Pereira[1,2], Patrick Delcroix[1,2], Nora Monnier[1,2], Barbara Matthys[1,2], Damien Revault[1,2]

[1]Swiss Tropical and Public Health Institute, Allschwil, Switzerland; [2]University of Basel, Basel, Switzerland; [3]Santé numérique au Tchad (SANU-TD), N'Djaména, Chad

Context

The Digital System for Improved Refugee Health Management (SysRef) project, developed, validated and implemented a digital solution with a clinical decision support system (CDSS) as core element but also including an electronic monitoring for vaccinations and pre- and postnatal consultations. It was funded by Stanley Thomas Johnson Foundation and implemented by Swiss Tropical and Public Health Institute (Swiss TPH) in partnership with the Centre de Support en Santé Internationale (CSSI), the Ministry for Public Health and Prevention (MSPP) and the United Nations High Commissioner for Refugees (UNHCR). The tool was piloted in three health centers in southern Chad bordering Central African Republic.

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The user satisfaction study

To evaluate the tool and improve its implementation through user feedback we conducted two in-depth surveys, 6 and 16 months after implementation. The repeated data collection allowed to follow user satis-faction over time. The study assessed five elements of successful CDSS implementation: adaptation, adoption, feasibility, acceptability and sustainability. We used a mixed methods approach. Apart from demographic information and questions about digital skills, the quantitative questionnaire was mainly based on Likert-scale items to score the satisfaction elements. For the qualitative part we split users into focus groups considering their role and gender.

Acceptance of the tool increased over time with high confidence in its advice among health workers and care seekers. Evidence suggests the tool influences clinical practices, such as consultation structuring, prescription compliance, and improved triage. It also enhances patient-nurse relationships and treatment adherence. Documentation requirements which increase the time per consultation was noted among the negative aspects. Resource shortages pose challenges for adaptation and feasibility of the tool, yet expansion to other health centers or nationally is desired by users.

The secret to success

Our study underlines the importance of a long-term commitment in order to achieve sustainable appropriation of the new tool in the routine service. During the development and validation of the tool, particular attention was paid to adaptation to the local context and co-creation. This was probably one of the success factors that led to the high acceptance of the tool.

Survey 1, N=62

- Excellent 19%
- Very good 29%
- Good 52%

Survey 2, N=52

- Acceptable 4%
- Excellent 23%
- Very good 40%
- Good 33%

Pie chart of overall satisfaction with the CDSS tool 6 months (survey 1) and 16 months (survey 2) after implementation. None of the participants chose the answer "poor" or "no opinion".
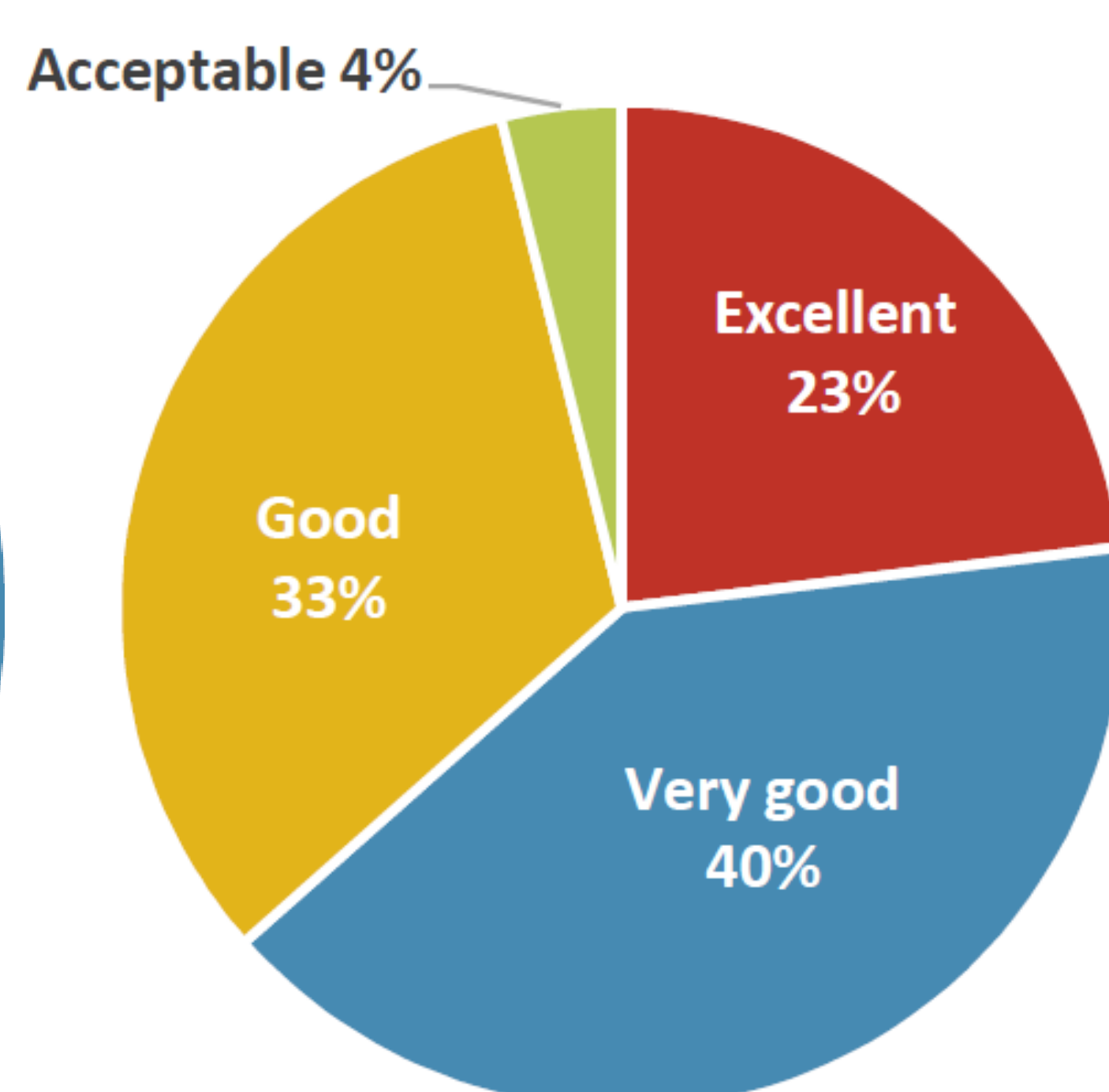
From SysRef to SANU-TD

The SysRef project continues under the acronym **SANU-TD** for "Santé Numérique au Tchad" (Digital Health in Chad) and is being extended to the national health system in the south of Chad through the Support project to health districts (PADS) funded by the Swiss agency for Development and Cooperation (SDC) as it is also offered to be used in other regions and by other partners.

More information on the SysRef project and on the user satisfaction survey can be found here:

Kreuzstrasse 2, 4123 Allschwil, Switzerland
+41(0)61 284 81 11, www.swisstph.ch