

SERVICE LEVEL AGREEMENT MONITORING (SLAM) EFFICIENCY PROJECT

LEEDS TEACHING HOSPITALS NHS TRUST

NORTH EAST AND YORKSHIRE, ACUTE

With special thanks to this team of innovators for taking part in the pilot of this programme and contributing to its development.



FOR INFORMATION ON THE
INNOVATION PROGRAMME
[CLICK HERE](#)

THE INNOVATORS

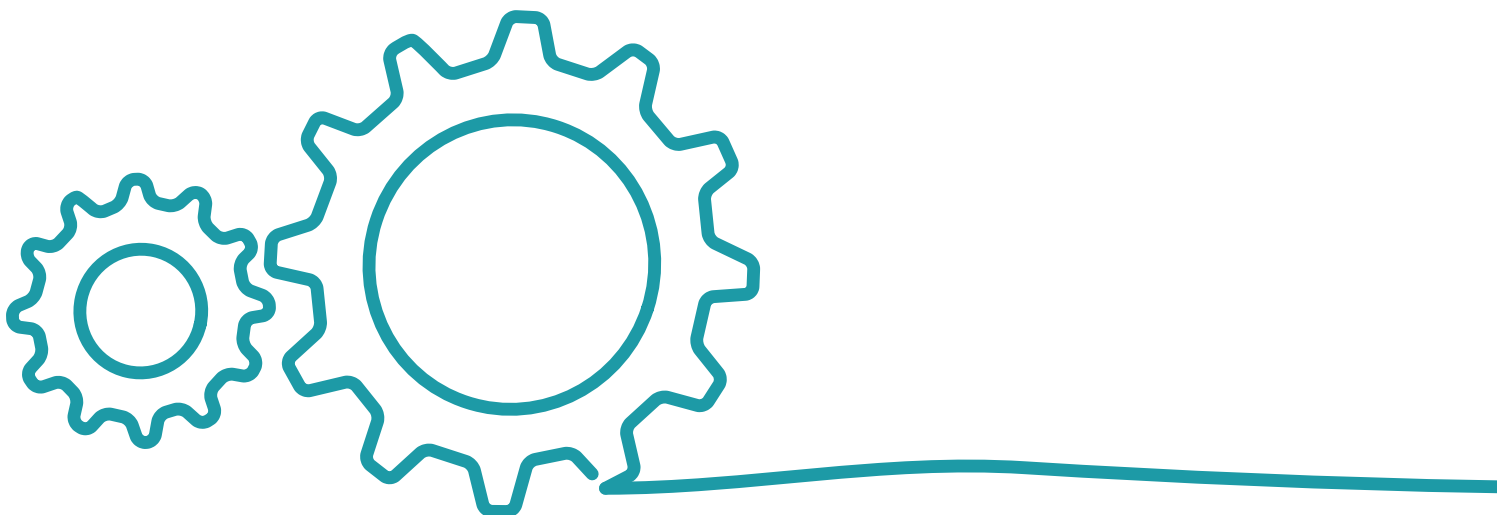
Ian Bridgman from Leeds Teaching Hospital Trust income and contracting team has developed an innovation, which utilises structured query language (SQL) skills to reduce processing time by a minimum of 50%, freeing up staff time to focus on more value-added work streams.

THE PROBLEM

The income team needs to produce monthly income and activity data in a timely manner for internal and external stakeholders because otherwise there would be serious repercussions regarding income recovery and financial sustainability.

THE CHALLENGE

How might we improve the monthly processing routine so that we can deliver the required information in accordance with Trust expectations and contractual agreements with commissioners or, even exceed those expectations, in the most efficient way?



THE INNOVATION

To overcome the challenge, we replaced the current process which was heavily reliant on MS Excel with an enhanced solution using MS SQL Server Management Solution (SSMS). Prior to implementation, the monthly process would take around four days to complete with final reports being issued to commissioners on the last possible submission date, as per our contractual arrangement. This also added further pressure on internal reporting arrangements due to how closely this coincided with month-end.

At Leeds we use Civica SLAM as our income reporting software. Each month we receive patient level data from our commissioning information (CI) team that would be loaded into SLAM using the ProAuto module included with SLAM, after which the 'model' (database) would require calculating. We would then work up various financial adjustments using a combination of SSMS to aid initial population of the Excel files with any further calculations and imports generated within Excel. Due to the nature of the adjustments this must be done in stages, with several calculations performed in-between the imports, before finally arriving with a finished model.

As we were already utilising SSMS for some elements of the process, we decided that it would be more efficient to move the entire process into a SQL environment. Several stored procedures were created which built on the existing queries; this enabled us to devise an end-to-end process which could be started at the point of the data being made available to us from CI and run all the way to the end, giving us a finished model without the need to import manually, or run multiple ProAuto jobs between stages.

ProAuto allows users to execute a pre-feed stored procedure (SP), created through the 'Transforms Workspace'; these SPs are executed at various stages of the process, executing queries and populating a number of tables, from which data is then extracted and imported into SLAM.

The whole process is now, generally, completed within two days, yielding at least a 50% time efficiency saving. However, efficiency is further increased because the ProAuto job takes up to 11 hours* to complete (*based on our final M12 submission, we do a full year refresh each month).

The time previously spent running the manual process can be used on other work streams, while ProAuto manages the process in the background (though typically a large proportion of this time would be running outside of core hours).

The revised process also helps reduce manual errors and omissions and is relatively self-sufficient, apart from updating the process at the start of a financial year and to incorporate any changes that may be required throughout the year.

THE LESSONS LEARNT

When the process was first set up the queries did not import data into static tables, instead we used views to extract the data from. However, we found that using views was unstable and prone to timeout errors. In particular, the closer we came to year end the more unstable the process became. We revised the process at the beginning of the next financial year to populate the data to be imported into tables within our SQL database; this is done as part of the stored procedure and was not affected by the same timeout issues because the imports were extracting data from the static tables rather than having to execute a query first to obtain the data to import.

We learnt to utilise stored procedures effectively through gaining a greater understanding of how powerful the Transforms Workspace can be.

THE OUTPUTS

The tangible products that came from our innovation were:

- a robust system/ process that has the potential to be executed by any member of the team without any great depth of or prior T-SQL knowledge
- a fully auditable process. Each stage of the process is documented and can be interrogated where required, should the need arise
- an automated end-to-end process which can be scheduled to run as and when desired, in particular outside of core office hours when there is generally less traffic on the network.

THE OUTCOMES

The benefits to the individual/ team/ organisation/ system experienced as a result of the innovation were:

- external reports being distributed to commissioners earlier
- internal reports distributed earlier resulting in more time being available to analyse the results prior to month end
- overall efficiency increased by a minimum of 50%, freeing up staff time to focus on more value-added work streams.

THE QUICK WINS

The quick wins

- Up skill the team by utilising the vast knowledge widely available on the internet, e.g. user forums.
- Make use of SQL workshops
- Constantly review repetitive processes to see where efficiency improvements can be made.

THE REVIEWERS SAID

“THIS INNOVATION SIGNIFICANTLY REDUCES REPORTING TIMES AND IMPROVES DATA QUALITY. IT PROVIDES A CLEAR AUDIT TRAIL FOR ASSIMILATING A SIGNIFICANT QUANTUM OF DATA, WITH REQUIRED ADJUSTMENTS INTO A REPORTABLE FORMAT.”

“INNOVATION SAVED TIME REDUCING THE PROCESSING BY 50% AND ADDITIONAL DAY AS AUTOMATED PROCESS TAKES 11 HOURS TO RUN.”

“INCOME LEVELS INVOICED IN A TIMELY MANNER AND MORE ACCURATELY, CERTAINLY THE STATISTICS PROVIDED SOUND PROMISING.”



WHAT YOU CAN DO NOW

SUBMIT INNOVATION

If you recognise the problem stated and have implemented your own innovation to overcome it please submit this innovation to the programme and give others more examples to learn from.

REGISTER INTEREST

If you recognise the problem stated and would like to know more details about this innovation in particular, we will be hosting showcase and workshop sessions throughout the year, so all interested staff can gain ideas and inspiration from innovators in a manageable one-to-many format.

SUBMIT PROBLEM

If you have a problem but don't currently know of a solution to it, then please submit it here and in 2022 the Forum intends to crowdsource solutions to problems that don't currently have known innovations.

LEARN MORE

If you would like to learn more about about the innovation programme please click for more details.

ENDORSEMENT DISCLAIMER

The Finance Innovation Forum's Innovation Programme asks NHS Finance peer reviewers whether the "Innovation overcomes, successfully addresses, or solves the problem identified". The programme does not endorse, recommend or provide any assurance of software used or mentioned in any of the published innovations. If you think a published innovation is being used to falsely validate a commercial product or company please contact finance.innovation@nhs.net



IN SEPTEMBER 2021 THE FORUM LAUNCHED...

- A national Innovation Programme for NHS Finance staff to submit their innovations for peer review. Successful innovations will be published and accessible to all on the One NHS Finance website
- A 'Software Skills For Finance Staff' event series taught by NHS Finance for NHS Finance including MS Excel, PowerBI, SQL etc.
- An 'Art of the Possible' briefing which explains two new technologies AI & Blockchain and discusses the opportunity for NHS Finance
- An Automation Group to review and improve the efficiency of existing national processes and returns

WHAT YOU CAN DO NOW

- Submit your innovations for peer review
- Sign up to be an innovation peer reviewer
- Read Art of the Possible
- Sign up for Software Skills for Finance
- Register your interest in automation and all things innovative

Innovation Programme



Software Skills



Automation sign up



Be a peer reviewer



Art of the Possible



FURTHER INFORMATION

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LinkedIn: [One NHS Finance](#)

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One NHS Finance brings together the Future-Focused Finance, National Finance Academy, and the Finance Innovation Forum programmes and networks to make sure that everyone working in NHS Finance has access to skills, knowledge, methods, and opportunities to influence and enhance patient services.



Identifying and developing innovative ways of working and new areas of improvement.