# Patient Information Leaflets: The Digital Transformation to MyMedicines

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### Introduction

- In 1995, the Canterbury District Health Board developed a library of Patient Information Leaflets (PILs) about medicines.
- These PILs were designed to be one A4-page of important points patients should know about their medicines.
- For the first two decades the PILs library content was maintained in over 400 individual Microsoft Word documents and in a restricted database, and was provided to distributors as either pdf documents or via an XML export function.
- As the library and the number of distributors grew, it became increasingly difficult to maintain, update and distribute content.

## Aim

- To transform the PILs library into a digitally-capable form. The project requirements included:
  - a system that could house all the content;
  - a distribution channel capable of providing content to multiple distributors;
  - a platform to support editorial functions, for example to easily locate and adjust the commonly-used terminology across the database.

# Method

- Agile-based user stories were developed to identify the functionalities that patients, health professionals, the editorial team, and distributors needed from the system.
- Community and Public Health were identified and engaged as a partner to create a system that could meet the identified requirements.

### My Medicines **Public Links** Home New Published Sheets Updated For Approval **Side Effects** Create new side effect **Usual Action** Updated Category Use for Flu-like symptoms (fever, chills, aches and pains) This usually passes after 8/10/2015 Admin reaction to zoledronic acid response paracetamol if needed Skin rash, skin peeling or blisters **SCARs** 27/01/2016 Stop taking and see your doctor My Medicines Home New Updated For Approval Sheets **Edit side effect entry Back to Side Effects** Category Skin Glossary terms Skin rash, skin peeling or blisters Use For **SCARs** Usual Action Stop taking and see your doctor immediately ₩... Sheets which include this side effect: 16

<u>Paracetamol</u>

<u>Primidone</u>

Carbamazepine

## Results

- A content management system (CMS) was developed as a multi-tier web application using Microsoft ASP.NET MVC and SQL Server.
- Publication was setup to the publicly-available MyMedicines websites (www.mymedicines.co.nz and www.mymedicines.co.nz/cdhb), and an XML export for distributors incorporating content into third-party software.
- Static urls were used so that once incorporated by the distributor any updates published in the database automatically point to the new version.
- A variety of formats (online, printable and large type printable formats, and also A4 and A5 pdf) were included to allow for different requirements of distributors and end-users.
- The system was divided into production process stages (Draft, Update, Approval, and Published), with audit traceability at each stage.
- Commonly-used content (e.g. side effects) was incorporated into look-up values that are able to be easily amended by the MyMedicines editorial team.
- From 1 Apr 2016 to 1 Feb 2018, there were 545,206 views of 434 available sheets, with the view count tripling in Oct–Dec 2017 compared to the same quarter in 2016.

## Discussion

- The new CMS met the requirements identified during development.
- Distribution via publicly-available websites has allowed free access to concise medicines information for patients whenever they wish to access it.
- The ability to have commonly-used terminology collated into look-up values simplifies review and adjustment of these terms to maintain consistency across the database.
- Time spent on updates and distribution is now able to be utilised in developing content and enhancing the product according to enduser feedback.

