Bser FHIR IG Proposal

Approved 2018-08-08
Contents

• 1 Bidirectional Services eReferrals (BSeR) FHIR IG
  • 1.1 Owning work group name
  • 1.2 Committee Approval Date:
  • 1.3 Contributing or Reviewing Work Groups
  • 1.4 FHIR Development Project Insight ID
  • 1.5 Scope of coverage
  • 1.6 IG Purpose
  • 1.7 Content location
  • 1.8 Proposed IG realm and code
  • 1.9 Maintenance Plan
  • 1.10 Short Description
  • 1.11 Long Description
  • 1.12 Involved parties
  • 1.13 Expected implementations
  • 1.14 Content sources
  • 1.15 Example Scenarios
  • 1.16 IG Relationships
  • 1.17 Timelines
  • 1.18 When IG Proposal Is Complete
  • 1.19 FMG Notes
Bidirectional Services eReferrals (BSeR) FHIR IG

Owning work group name
Public Health

Committee Approval Date:
January 31, 2018

Contributing or Reviewing Work Groups
- Patient Care
- Clinical Quality Information

FHIR Development Project Insight ID

Scope of coverage
Bidirectional Services eReferrals (BSeR) involves the exchange of information between clinical care Electronic Health Records (EHRs) and service systems that reside in community services, lifestyle change, and public health organizations. It also involves the return of information from the services programs to clinical care. The requirements for this specification are driven primarily by the needs of the U.S. National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), a division within the Centers for Disease Control and Prevention (CDC). NCCDPHP supports a variety of activities that improve the nation’s health by preventing chronic diseases and their risk factors.

IG Purpose
The goal of the BSeR project is to streamline and enhance the efficacy of the exchange of health information between health care systems and community services organizations involved in addressing chronic health conditions by establishing information exchange standards for electronic referrals and referral outcome reporting.

Content location
https://github.com/HL7/bser

Proposed IG realm and code
us:bser

Maintenance Plan
Funding for the project are provided through the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Through the programs operated by the NCCDPHP, the Centers for Disease Control and Prevention (CDC) works to prevent chronic diseases and reduce their health and financial costs with an approach that brings together monitoring to understand the problems, communities to work toward solutions and support healthy behaviors, and health care systems to detect problems early and help reduce or eliminate unhealthy behaviors. The funding extends through the two-year anticipated STU period for this specification. Beyond that the committee will be seeking volunteers or additional funding from NCCPHP or related entities.

Short Description
The Bidirectional Services eReferrals (BSeR) FHIR IG provides guidance on STU3 FHIR Resources and US Core IG profiles for use in exchanging a referral request and specific program data from a clinical provider to a typically extra-clinical program service provider, such as a diabetes prevention program, a smoking quitline, or a hypertension management training program. And provides for the return of feedback information from the service program to the referring provider.
Long Description

The requirements outline in this specification were driven primarily by the needs of the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), a division within the Centers for Disease Control and Prevention (CDC). NCCDPHP supports a variety of activities that improve the nation’s health by preventing chronic diseases and their risk factors. Program activities include one or more of our major functions: supporting states’ implementation of public health programs; public health surveillance; translation research; health communication; and developing tools and resources for stakeholders at the national, state, and community levels. Chronic diseases such as heart disease, cancer, chronic lung diseases, stroke, and type 2 diabetes account for most deaths in the United States and globally. They are the major causes of sickness, disability, and health care costs in the nation. Chronic diseases are responsible for 7 in 10 deaths among Americans each year, and the vast majority of health care costs. Chronic diseases are common, costly, and debilitating, and they can often be prevented. By choosing healthy behaviors like avoiding tobacco, eating and drinking healthy foods and beverages, and getting regular physical activity and enough sleep people can reduce their chance of getting a chronic disease or improve their health and quality of life if they already have a chronic disease. The programs operated by the NCCDPHP include: Cancer, Diabetes, Heart Disease and Stroke, Nutrition, Physical Activity, and Obesity, Oral Health, Preventing Chronic Disease E-Journal, Population Health, Reproductive Health, Smoking and Tobacco Use, Tribal Resources.

Through the programs operated by the NCCDPHP, the Centers for Disease Control and Prevention (CDC) works to prevent chronic diseases and reduce their health and financial costs with an approach that brings together monitoring to understand the problems, communities to work toward solutions and support healthy behaviors, and health care systems to detect problems early and help reduce or eliminate unhealthy behaviors. NCCDPHP works to prevent chronic diseases and reduce their health and financial costs by working in conjunction with healthcare systems, healthcare payer organizations, and community organizations to work toward solutions and support healthy behaviors. The BSeR Data Exchange Standards Development Project is part of that larger effort.

Involved parties

The sponsoring workgroup for this project is the HL7 Public Health workgroup with co-sponsorship provided by Patient Care and Clinical Quality Information workgroups. Funding for non-volunteer project resources is provided by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). The project facilitator is John W. Loonsk MD, CGI Federal and Consultant to CDC. The project modeling and publication facilitator is AbdulMalik Shakir, President, Hi3 Solutions, Inc.

Expected implementations

Expected implementation includes the ten programs of the NCCDPHP and community service providers such as the YMCA of North America and the North American Quitline Consortium.

Content sources

Content sources include the BSeR Domain Analysis Model. The BSeR DAM is a conceptual model of the functional and information requirements of Bidirectional Services eReferrals (BSeR). The requirements gathering and analysis approach taken by the BSeR project was to conduct interviews with CDC chronic disease programs and a representative subset of CDC recognized service providers. Interviews were held with program and service representatives involved with the following health conditions: arthritis, diabetes prevention, early childhood nutrition, hypertension, obesity, and tobacco use cessation. The interviews focused on gaining an understanding of current workflow, especially areas of the workflow that involves an inter-enterprise exchange of health information. A potential future-state workflow was used to assist in provoking out-of-the-box thinking and to solicit feedback regarding pain points and process change feasibility.

The BSeR DAM is a record of the findings and analysis stemming from subject matter expert interviews. The DAM presents a generic process flow incorporating and abstracting key aspects of each of disease area specific workflows. Not all aspects of the process flow depicted in the DAM is applicable to all programs. Similarly, the information model portion of the DAM is comprised of a set of shared or common program data and a set of program-specific data. Data modeling was used to harmonize information requirements and to express data in the data model using an abstract conceptual framework conducive to reuse across programs and portable to existing HL7 CDA and FHIR standard data structures.

The content profiles from the U.S. Core FHIR IG will be used to the fullest extent possible as well as the Version 1.3 of the Common Clinical Data Set summary record updated on 05-02-2018.

Example Scenarios

There are two usage scenarios covered by this IG. 1. Clinician referral to a community service; 2. Community service provider feedback to the referring clinician. An example of these scenarios is a clinician referral of a patient to a smoking cessation program operated by a regional Quitline organization. The Quitline organization will provide feedback to the provider following intake, service delivery, and final treatment.

IG Relationships
There are no other IGs that depend upon the BSeR FHIR IG. However, the BSeR FHIR IG relies heavily upon resource profiles defined as part of the U.S. Core IG.

Timelines

Development of the BSeR IG started in June 2018 upon completion of the BSeR DAM. A preview version of the IG is being prepared for inclusion in the September 2018 ballot and will be available for preview on August 6, 2018. Final ballot content is targeted for August 17, 2018 following review and input from the sponsoring and co-sponsoring workgroups.

When IG Proposal Is Complete

When you have completed your proposal, please send an email to FMGcontact@HL7.org

FMG Notes