Agenda

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About us at 4Science: Our values, mission, vision and introduction

An overview of the Italian health system

A quick overview of DSpace-CRIS 7

The challenge: A proposal for a national repository for publications and research data

What the individual institute can do with the platform

The platform: accesses

The platform: access checks

The platform: user management

Opportunities

The U.S.A medical institutions using DSpace

Who we are

OUR AIM: to enable implementation of the transnationally important policies of Open Research, Research Impact and Digital Preservation.

4Science provides solutions for **research information & data management and for cultural heritage.**

Certified Platinum provider of DSpace and a major contributor to DSpace, leading DSpace 7 committer, our solutions include:

- DSpace-CRIS
- DSpace-GLAM
- OJS
- Dataverse

Our services:

- Installation
- Configuration
- Hosting and maintenance
- System integration, customization and consultancy

Our solutions support compliance with key international standards:
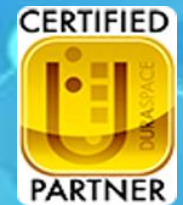
- OpenAIRE
- ORCID
- CERIF
- IIIF

What we believe in

Security Certification is not a matter of compromise: our solutions are secure by design; openness without security would be counterproductive; security without openness would be unproductive.
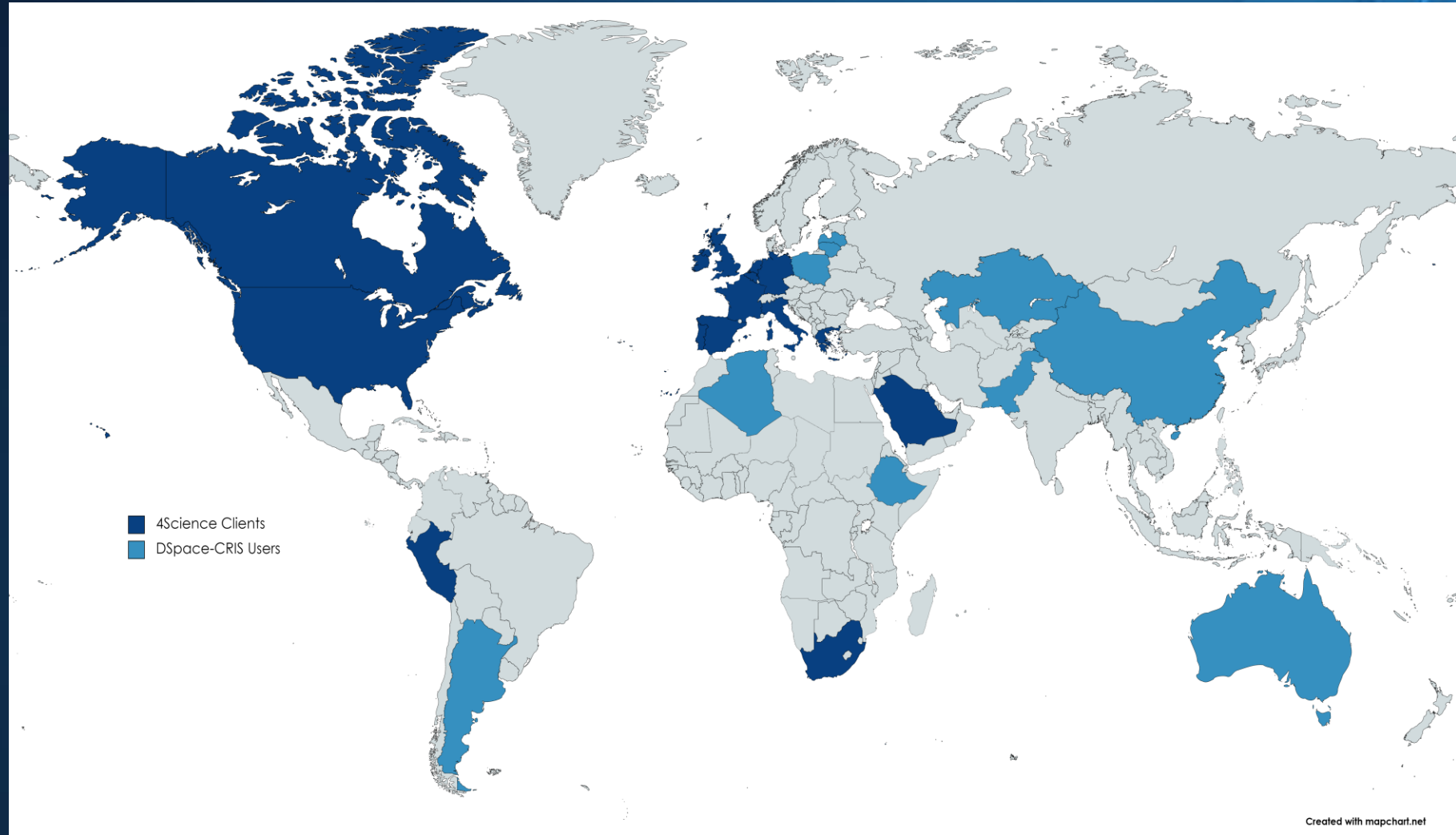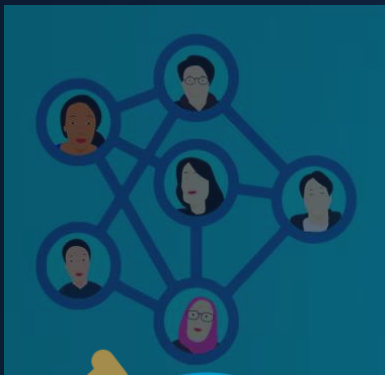
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- Open-source software
- Open standards
- Innovation
- Our solutions support the key defining transnational policies, Open Research and open digital cultural heritage, and are based on:
- Interoperability
- Collaboration
- Preservation

DataCite SERVICE PROVIDER

powered by aws

ISO/IEC 27001:2013, 27017:2015, 27018:2019, and ISO/IEC 9001:2015

CLOUD SECURITY ALLIANCE
Trusted Cloud Provider
CSA

ISO 9001 BUREAU VERITAS Certification
BUREAU VERITAS 1828

CERTIFIED PARTNER DURASPACE

ACCREDIA
L'ENTE DI ACCREDITAMENTO

iD CERTIFIED Service Provider

A fast-growing organization

Over 100 clients in 5 continents worldwide

4Science Clients
DSpace-CRIS Users

Created with mapchart.net

https://www.4science.com/we-work-for/

An overview of the Italian health system

Italy's health care system is a national health service based in regions

The system provides universal coverage free of charge for all Italian citizens, as well as foreign citizens living in the country with a regular permit

The service is free of charge at the point of service and is guided by the principles of universal coverage, solidarity, human dignity, and health

The national healthcare system is mainly funded through national and regional taxes, supplemented by private expenditure and insurance schemes.

Public Funding made up approximately three-quarters of total health care spending.

DSpace-CRIS: the perfect CRIS/RIMS for Universities and Institutions

A tool that enables secure, integrated and interoperable research information and data management – in a single solution.

A tool that is compliant with and supports key international standards, facilitating interoperability and data transfer.

Based on DSpace, providing broader functionality and an expanded data model, relying on its large community

A comprehensive, free and open-source Research Information Management System

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DSPACE CRIS

Why institutions need it?

- To efficiently assess their performance and allocate resources

- To promote their assets and activities

- To track and apply for new funding opportunities

- To exchange information with external systems and databases

Why is is considered so unique?

DSpace-CRIS helps you to collect and manage

research data and information, including:

- your researchers and groups

- departments and organizational units

- laboratories and infrastructures

- projects and collaborations

- contracts and events

- Publications, patents, awards, and many more

  IN ONE SOLUTION

DSpace-CRIS roadmap: a tool moving forward

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Short Term

- Alignment with DSpace releases (7.4 in October 2022)
- Support for metadata in multiple languages
- Visualization of information related with user's language

Medium term

- Stay aligned with International standards (COAR NGR, COAR Notify, OpenAIRE)
- Provide an out-of-the-box solution for the specific research domain needs that are always evolving
- Increase the integrations and the possibilities of information's interchanges to reduce to the minimum the researchers' efforts

Long Term

- Modularization of the platform by lightening DSpace-CRIS focusing exclusively on the specificities of the domain
- Moving the general capabilities applicable to multiple domains on DSpace
- Allow the extension of the platform through external addons easily maintainable (AI, analytics, semantic web, etc).

Why adopt DSpace-CRIS in the medical world
a technical overview

- Share and disseminate research papers and research material for public health and citizens' benefits:
  - Articles
  - Datasets
  - Diagnostic Images
  - Healthcare protocols
  - Therapies
  - Patents
  - and much more!

The Project Proposal

Development of an IR for many healthcare institutions.

Each Institute will have its own community in which to organize and provide access to its content according to a common standard aligned with the reporting requirements of the funders, which defines the types of materials supported:

- Articles

- Books

- Datasets

- Projects

- descriptive metadata for each type

What can the single institute do with the platform?

- Decide whether to activate a flow of verification of information and define its actors

- Decide whether or not to activate the automatic recovery flow from PubMed for its researchers and afferents, and manage the approval of what has been identified

- Assign persistent identifiers to its materials, Handle and / or DOI that can be maintained even if the Institute decides in the future to leave the collective initiative and establish its own repository

What can the single institute do with the platform?

- Customize the branding (logo, colors, styles) of your community so that all your material and navigation within the institute's material alone recalls the institutional brand

- Have pages for searching and browsing content "limited" to their material

- Generate the export excel necessary for reporting and analysis

- Access and update their content, according to the privileges available to the user, via REST API

The platform: accesses

- The platform will also allow unified access to health-related material, with cross-cutting research and exploration possibilities.

- At a centralized level, the following subscriptions will be managed

  - ORCID

  - Scopus

  - Wos

  - Get all the APIKEY (free) to query external databases (crossref, pubmed, etc.) or services such as sherpa/romeo
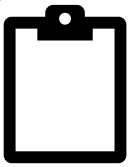
The Platform: User Management

- User and access management will remain centralized.

- It is possible to activate additional access modes specific for users of certain institutions (LDAP, Shibboleth, OIDC, etc.) which will be visible and potentially usable throughout the platform.

- The administrator of the platform will be able to request and approve configuration changes at the central level, support individual institutions if necessary and proceed with the activation of new communities (Institutes).

Opportunities

- Extensions, integrations and add-ons can be added to the platform to complete and enrich the system

- Addons in a shared installation bring so much value that it can be broken down as costs

  - DocViewer

  - UX Plus

  - Analytics

Integrations:

integration with Amnesia: with a dataset of clinical trials therefore a system that can tag datasets that contain personal data and provide an anonymized copy can give a lot of value

DSpace in the U.S.A healthcare institutions

a pubmed.com research

Survey results from a PubMed research (The institutional repository landscape in medical schools and academic health centers: a 2018 snapshot view and analysis - PubMed (nih.gov)) indicate that a large majority of responding medical schools and academic health centers have or are implementing an IR (35 out of 50, 70%). Of these, 60% (21 institutions) participate in an institution-wide IR rather than administer their own repositories.

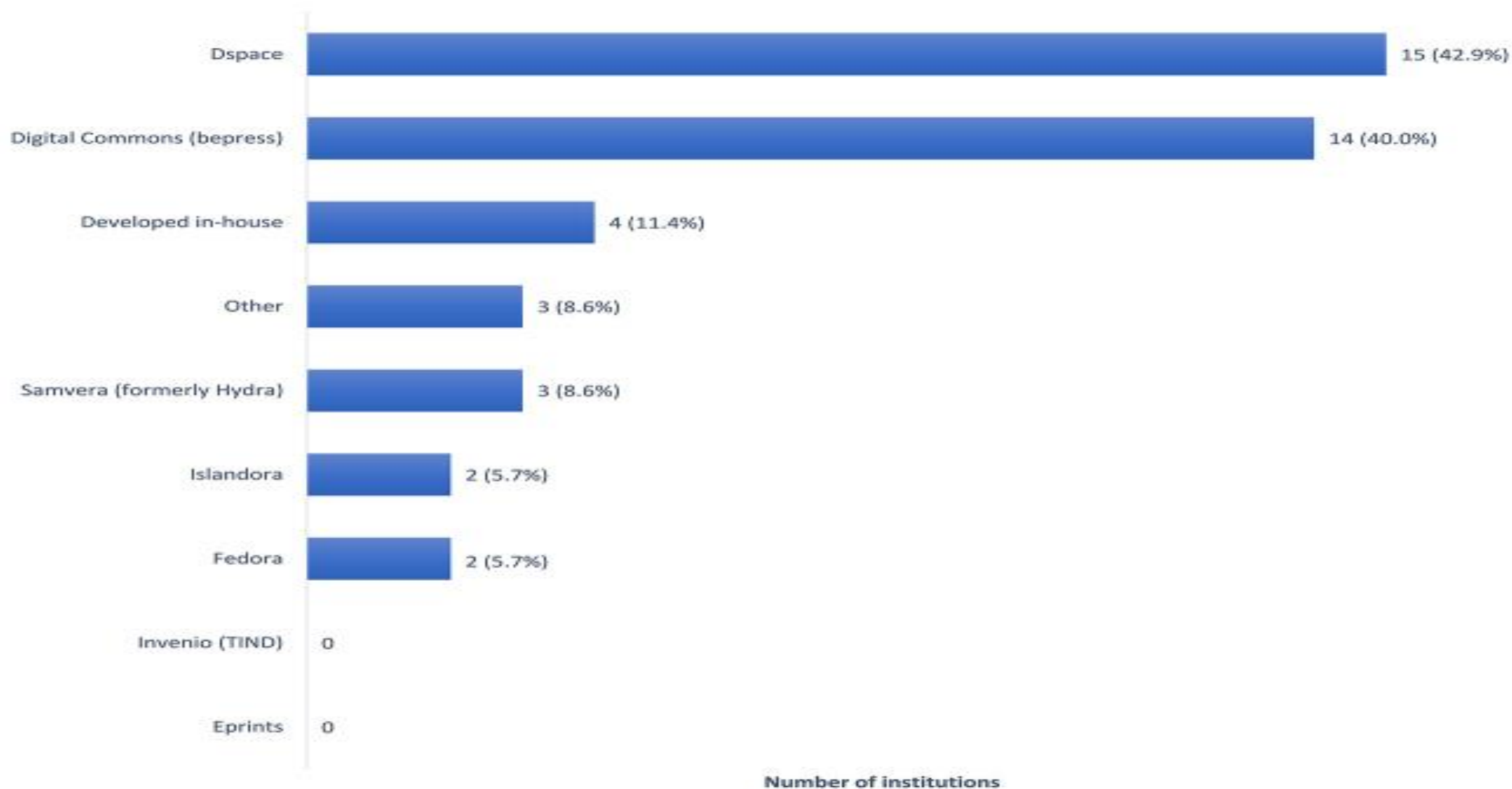DSpace is the most popular repository platform in this community.

The planned enhancements that were most frequently reported were implementing a discovery layer and ORCID integration
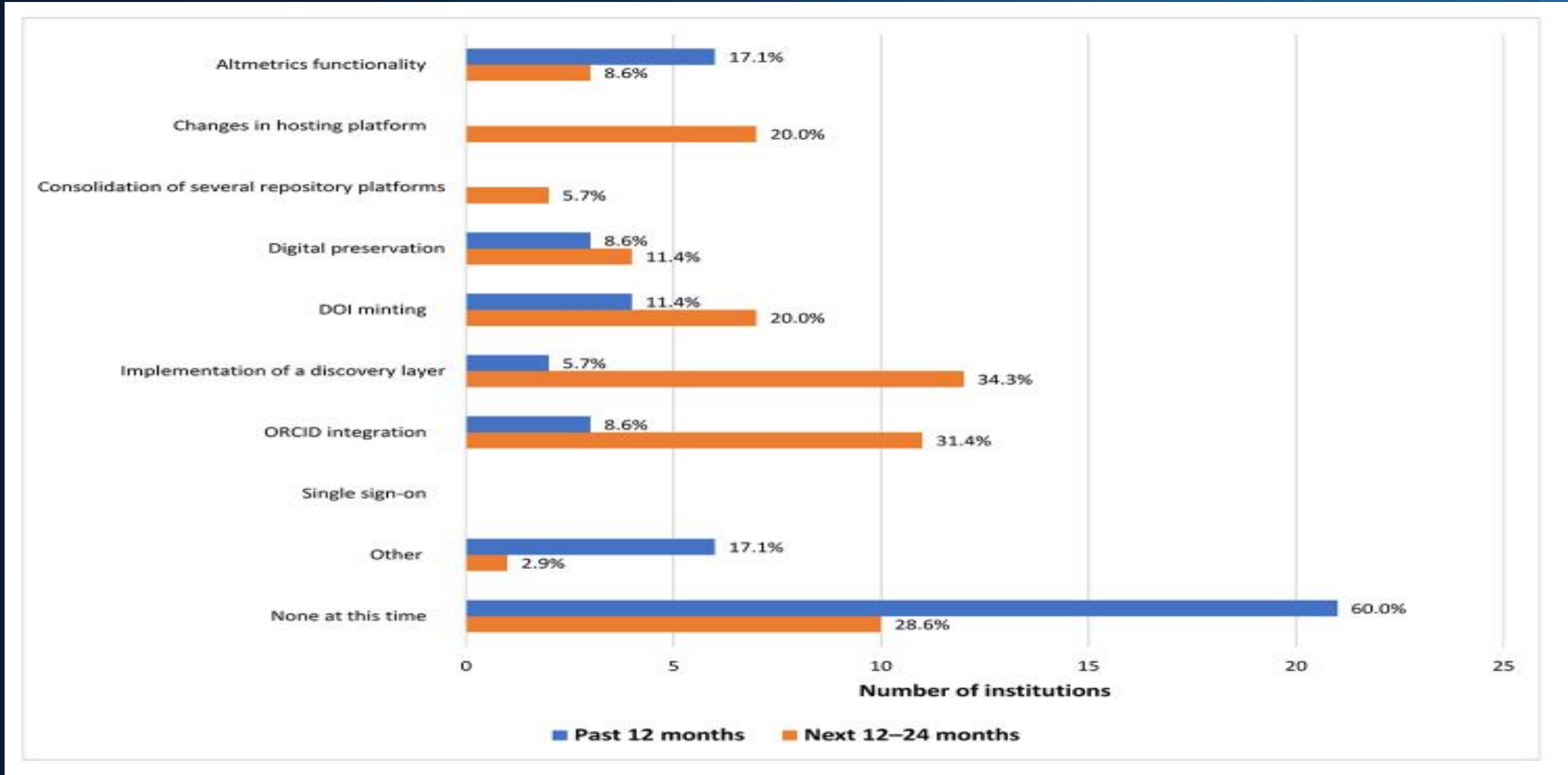
Analysis of respondent comments identified the following themes: integration, redundancy, and reporting; alternatives and exploration; uniqueness; participation; and funding and operations.

Medical Digital repository platforms in the U.S

Conclusions

4Science was able to develop a plan for a very complicated system and facilitate the use of Digital Repositories in a very intricated environment
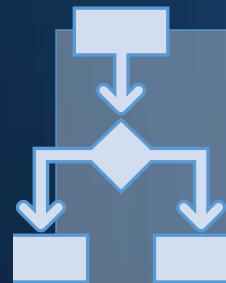
In the future (but already is) IR will become crucial for medical and research institutions

DSpace-CRIS 7 is the right tool to help the medical and research institutions to be at the top increasing their visibility and prestige

DSpace-CRIS extensions and add-ons help the institutions with flexibility enhancing the power of the IR as a tool

Many U.S institutions already choose DSpace as their IR platform and many more are expected to join the DSpace community

Thanks to 4Science's decades of experience in the IR world, we are here to support you in any aspects of your project, and we would love to assist you to write a new more open future together

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Share your knowledge

WWW.4SCIENCE.COM

Thank you for your attention!

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Follow us on LinkedIn!