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Registration and use of ORCID by pharma

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ABSTRACT

Objective

An ORCID identifier (ORCID iD) provides an author with a unique, persistent digital identifier, providing author disambiguation and increasing transparency and discoverability. We analyzed the uptake and use of ORCID iDs by six pharmaceutical companies.

Research design and methods

Registration data for pharma authors were extracted and pooled using ORCID's application programming interface (API) and company email domains (e.g. @gsk.com). To assess ORCID use at the publication level, a search for 'clinical trial' was conducted for each organization in PubMed (01/01/2018–01/07/2019);

INTRODUCTION

- Transparency and discoverability are essential for establishing trust across a global community of pharma company and academic collaborators.
- Open Researcher and Contributor ID (ORCID) provides authors with a unique persistent digital identifier (an ORCID iD) that solves author disambiguation and allows trusted connections between researchers, their affiliations and their contributions.
- There are more than 7.5 million ORCID iDs in use by the research community and over 1000 member organizations, consisting of academic institutions, funders and publishers, that benefit from the assurance provided by ORCID.
- Until now, no pharma companies have integrated ORCID into their own systems; however, pharma company researchers use ORCID iDs during the article publication process, when they are requested or required to do so by the publisher.
- The level of ORCID uptake by pharma company researchers has not been previously assessed and reported.

author information was retrieved using ORCID's API for the ORCID iDs found in the PubMed record metadata. Results

Pharma ORCID registrations increased between 01/06/2017 and 30/06/2019, based on email domains; GlaxoSmithKline demonstrated a higher than average increase in registrations, following an internal pilot. PubMed data for 843 articles from 346 journals were extracted. Of the 10 091 authors, an ORCID iD was included 388 times (4%); 56% corresponded to first/last author. Only one ORCID iD was submitted for 68% of papers (158/234) that included ORCID iDs. Of the 343 unique iDs, 17% were affiliated to the six companies. Of the authors that included ORCID iDs and authored

OBJECTIVE

pharma companies.

RESEARCH DESIGN AND METHODS

- (Figure 1).

FIGURE 1. Study design for the analysis of the use of ORCID in publications.

SEARCH

An advanced search in PubMed was designed with the following criteria.

Field 1: affiliation; [name of organization]

Field 2: publication; 2018/01/01 to 2019/07/01

Field 3: publication type; 'clinical study', 'clinical trial', 'clinical trial, phase i', 'clinical trial, phase ii', 'clinical trial, phase iii', 'clinical trial, phase iv', 'multicenter study', 'randomized controlled trial'

PUBMED AND ORCID DATA EXTRACTION

MEDLINE data, including PubMed ID author names, affiliations, ORCID iDs, title, publisher, journal, DOI and publication date, were extracted from the search results

API, application programming interface; DOI, digital object identifier; ORCID iD, Open Researcher and Contributor ID identifier.

REFERENCE

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multiple papers, 91% (110/121) inconsistently provided an iD on all publications captured. Records listed employment details (28%), funding (5%) and published works (48%), and 67% were updated within the 3 months before analysis.

Conclusions

ORCID uptake by pharma is increasing. However, despite an increase in the registration and use of ORCID, the inclusion of ORCID iDs in published articles remains inconsistent. Education of authors, journals and editors on the benefits of ORCID may improve practices in scholarly publishing.

Keywords: Authorship, Best practice, Metrics, Tools

The aim of this study was to assess the current uptake and use of ORCID in publications funded by six of the leading

• To determine the uptake of ORCID, registration data from June 2017 to June 2019 were extracted and pooled using ORCID's free application programming interface (API) and the email domains from the companies of interest.

• To assess ORCID use in publications funded by the companies included in the analysis, metadata were extracted from PubMed for the period between January 2018 and July 2019

 ORCID profile information for internal employees and external collaborators who had an ORCID iD recorded in the PubMed metadata was extracted using ORCID's API.



RESULTS

Uptake of ORCID among pharma employees

six companies combined.



STRENGTHS AND LIMITATIONS

- The current analysis assessed the uptake and use of ORCID associated with six of the top pharma companies across a large data set of articles published in a wide range of journals.
- The total number of registered authors captured for individual companies been captured during the publication process in order to be is a minimum case of adoption because authors may not always choose to entered into the metadata (Figure 6). add their company email domains to their ORCID record.

FIGURE 6. Publishing process stages at which an ORCID iD may have been captured.



Manuscript submission by a corresponding author ORCID iD, Open Researcher and Contributor ID identifier.

DISCLOSURES

MB (https://orcid.org/0000-0001-7234-3684) and AM (https://orcid.org/0000-0003-2161-3781) were employees of ORCID, Inc. at the time of writing. MB is now an employee of DataCite. AM is now an employee of NISO. AC (https://orcid.org/0000-0002-8631-3838) is an employee of ORCID, Inc. PF (https://orcid.org/0000-0002-0569-9688), SS (https://orcid.org/0000-0003-0611-6226), JM (https://orcid.org/0000-0002-3419-2181) and TR (https://orcid.org/0000-0003-0221-0098) are employees of Oxford PharmaGenesis Ltd, Oxford, UK.

Submission system request

for all author ORCID iDs

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• ORCID registrations by internal employees increased from June 2017 to June 2019 (Figure 2). • GSK, one of the companies studied, showed a higher than average uptake of ORCID with an increase in registrations of 242% compared with a mean increase of 120% across the

Use of ORCID in publications

and external collaborators.





- Papers that listed an ORCID iD mostly did so for only one author (Figure 3).
- ORCID iDs were often provided for the first author (Figure 4).
- Of the 343 unique iDs, 17% (60/343) were affiliated to one of the six companies.
- mainly inconsistently listed (Figure 5).



- Not all registered users would have necessarily published within the period used for the PubMed data extraction. • The data extracted from PubMed assume that ORCID iDs have





All author ORCID iDs requested at final approval to publish

ORCID iDs added to Crossref metadata on online publication



Manuscript archived on PubMed

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CONCLUSIONS

- Registration with ORCID by pharma employees is increasing; however, the inclusion of ORCID iDs in published articles remains inconsistent.
- When ORCID iDs have been listed in publications, it is usually only for a single author.
- ORCID iDs were inconsistently listed for authors who had published multiple articles.
- Educating pharma researchers on the importance and potential benefits of ORCID could help with its adoption, as shown by the GSK pilot, which led to an increase in the uptake of ORCID at GSK.¹
- Implementing ORCID as part of pharma publication management solutions could also help to improve how ORCID is used, with the potential to realize the benefits that it can provide.





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