



Enrich the Manuscript

A WHITE PAPER BY



The power of content is unlocked only when it is shared with the world

In today's context, content has become multifaceted. It is no longer just about the manuscript. Supporting data such as appendices, supplementary materials, datasets etc., has become as crucial as the primary content.

There is also a wealth of information in the form of metadata that enhances and adds value to the raw manuscript. Cross linking pieces of content to public databases and interlinking between the various content pieces also adds another dimension to the content workflow.

With its AI and ML based content enriching and editing capabilities, kriyadocs brings content to life by:

- ensuring consistency
- verifying validity
- improving discoverability
- enhancing presentation

Enriched content

We believe that content can be made so much more powerful by enriching and enhancing it. kriyadocs' AI driven tools make it easy to increase quality and add value to your documents.



The need for kriyadocs



Our vision is to make publishing all content as simple as **clicking a button**.

At Exeter Premedia, we've partnered with prestigious publishing houses across the world for **over 15 years** and delivered world class, publication-ready digital & print content by applying cutting-edge technology, streamlined processes and **extensive domain expertise**.

The publishing lifecycle is riddled with a lot of intricate touchpoints that often end up frustrating authors and publishers because a lot of their precious time and effort gets spent on a convoluted cycle of chores – formatting issues, version changes, status tracking, email volleys, approval delays, repeated follow-ups, and more.

We felt there had to be a better way to make publishing simple and easier. It is with that goal that we huddled our best minds and created **kriyadocs** – an online collaboration platform that brings all the stakeholders together to get work done.

With its **XML-first workflow**, on the fly proofing-and-editing capabilities, configurable workflows and integrated content management system (CMS), kriyadocs serves as the **single-source window** for our clients to **transform content** in any input format to multiple output formats including web and print PDFs, ePub and enhanced ePub with multimedia capabilities.

We endeavor to continuously enhance the capabilities of kriyadocs to meet ever-evolving client needs and challenges, while keeping up with advancements in technology, and nimbly adopting industry standards and best practices.

Transformation from manuscript to publication

The kriyadocs way

1



Conversion and styling

2



Automated editing

3



Data validation

4



Intelligent queries

5



Metadata addition

6



Language refinement

7



Real-time proofing

8



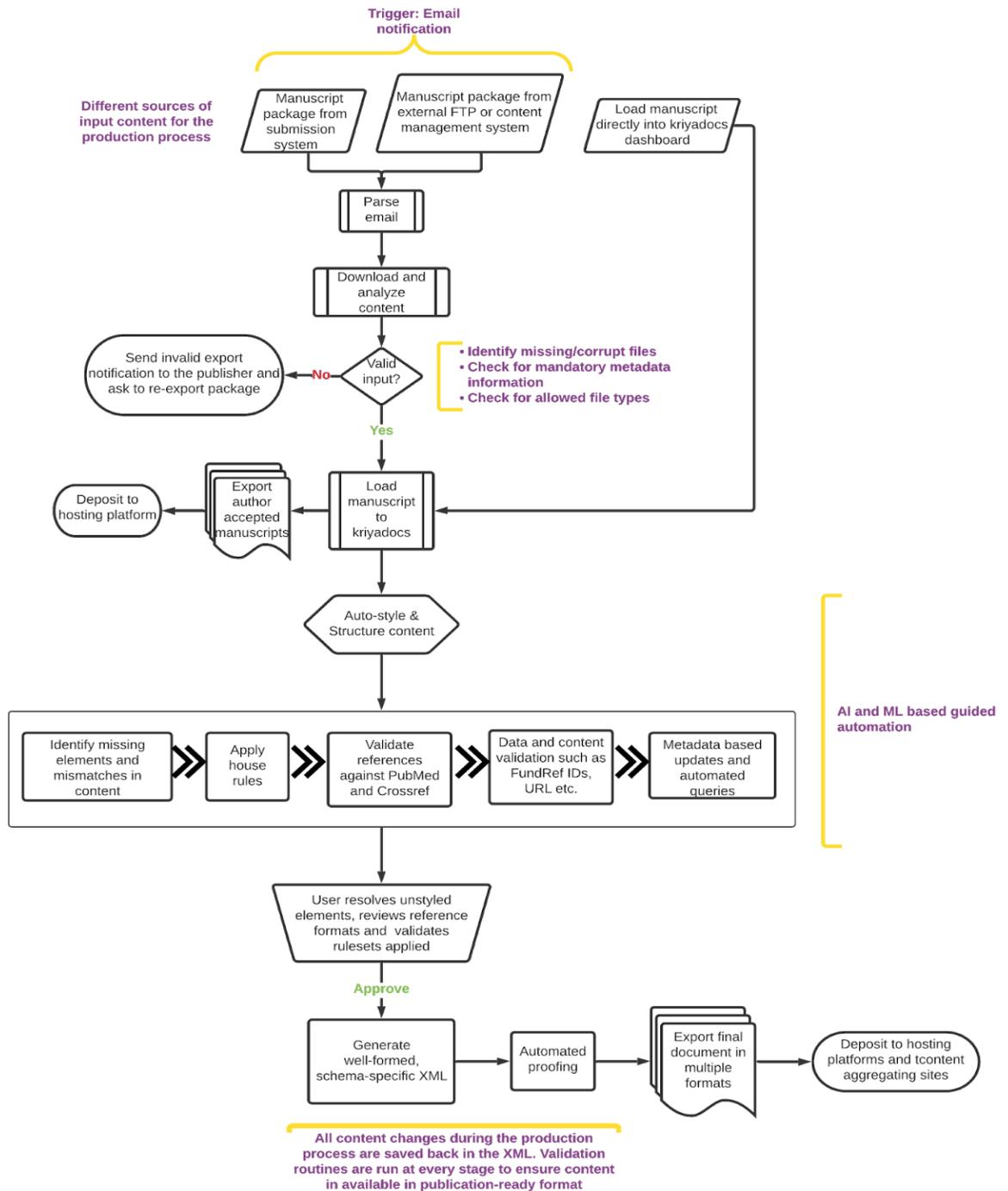
XML validation

9



Accessibility improvement

Transformation from manuscript to publication





Step 1

Conversion and styling

XML first from the get-go

Tag content sections and objects

The screenshot shows a web editor interface. On the left, there is a sidebar with a search bar and a grid of tags. The main editor area displays a document with the following content:

Authors

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Keywords: Mobility, Hip implant, Arthroplasty, Joint replacement

ABSTRACT

Aims

Dual mobility implants in total hip arthroplasty are designed to increase the functional head size thus decreasing the potential for dislocation. Modular dual mobility (MDM) implants incorporate a metal liner (e.g., cobalt-chromium alloy) in a metal shell (e.g., titanium alloy), raising concern for mechanically assisted crevice corrosion at the modular liner-shell connection. We sought to examine fretting and corrosion on MDM liners, to analyze the corrosion products, and to examine histologically the periprosthetic tissues.

Methods

Sixty retrieved liners were subjectively scored for fretting and corrosion. The corrosion products from the three most

AI/ML-based reference styling and formatting

REFERENCES

1. Fischer S, Beattie T. The limping child: epidemiology, assessment and outcome. *J Bone Joint Surg Br* 1999;81:1029-34. PMID:<https://www.ncbi.nlm.nih.gov/pubmed/10615981>. doi:10.1302/0301-620x.81b6.9607.
2. Jain N, Sah M, Chakraverty J. Radiological approach to a child with hip pain. *Clin Radiol* 2013;68:1167-78. doi:10.1016/j.crad.2013.06.016.
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4. Altemeier W. Pediatric orthopedic infections: missed diagnoses. *Pediatr Ann* 1999;28:718-20. PMID:<https://www.ncbi.nlm.nih.gov/pubmed/10615672>. doi:10.3928/0090-4481-19991201-03.
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6. Beach R. Minimally invasive approach to management of irritable hip in children. *Lancet* 2000;355:1202-3. PMID:<https://www.ncbi.nlm.nih.gov/pubmed/10770298>. doi:10.1016/S0140-6736(00)02082-1.
7. McCanny P, McCoy S, Grant T. Implementation of an evidence based guideline reduces blood tests and length of stay for the limping child in a paediatric emergency department. *Emerg Med J* 2013;30:19-23. PMID:<https://www.ncbi.nlm.nih.gov/pubmed/22389351>. doi:10.1136/emermed-2011-200604.
8. Whiting P, Rutjes A, Westwood M. QUADAS-2: a revised tool for the quality assessment of diagnostic accuracy studies. *Ann Intern Med* 2011;155:529-36. PMID:<https://www.ncbi.nlm.nih.gov/pubmed/22007046>. doi:10.7326/0003-4819-155-8-201110180-00009.



Step 2

Automated editing

Stay true to your style

Style changes are tracked and highlighted for easy review

Clinical Risk Prediction Tools

Our review identified two multivariate clinical risk prediction tools for septic arthritis ~~amongst~~ among children presenting with non-traumatic limp that have had their validity assessed in populations separate to their derivation sample.

The four components of Kocher *et al.*'s prediction tool are non-weight bearing status, fever, raised WBC count ($\geq 12 \times 10^9/L$) and raised ESR ($\geq 40 \text{ mm/hr}$) (Table 3). Caird *et al.* derived an alternative prediction tool that included a fifth parameter, CRP $\geq 20 \text{ mg/L}$, in addition to Kocher's original four-predictor model (Table 3).

Notably, the performances of both clinical risk prediction tools are significantly worse in external validation studies (Table 3). In Kocher *et al.*'s original derivation study, the predicted probability of a child presenting with non-traumatic limp having septic arthritis was 99.6% when all four components were present. However, when this clinical risk prediction tool was applied in two external validation studies, the predicted probability of septic arthritis ranged from 58.1% to 93%. The area under the receiver-operator curve, was also notably lower in both studies compared to compared with Kocher *et al.*'s original derivation study (0.80¹⁵ and 0.86¹⁴ respectively compared to compared with 0.96).

A similar observation was seen when the external validity of Caird *et al.*'s prediction tool was assessed in Sultan *et al.*'s follow-up study, with a comparable reduction noted in the predicted probability of a child having septic arthritis when all five predictors were present in a new population group (60% compared to compared with 98%).

Link objects to their corresponding citations in the text

Step 3

Data validation

Maintain data integrity

References are validated against PubMed and Crossref

Automated reference formatting per prescribed guidelines

Here are the validation results we got from PubMed and/or CrossRef and styled according to the Publisher's style guide.

Original Reference:	Final Reference:
4. Morris JM, Roberts CL, Bowen JR, et al. Immediate delivery compared with expectant management after preterm pre-labour rupture of the membranes close to term (PPROMT trial): a randomised controlled trial. <i>Lancet</i> 2015; 387 :444-490. https://www.ncbi.nlm.nih.gov/pubmed/26564381 . 10.1016/S0140-6736(15)00724-2.	4. Morris JM, Roberts CL, Bowen JR, et al. Immediate delivery compared with expectant management after preterm pre-labour rupture of the membranes close to term (PPROMT trial): a randomised controlled trial. <i>Lancet</i> 2016; 387 :444-52. https://www.ncbi.nlm.nih.gov/pubmed/26564381 . 10.1016/S0140-6736(15)00724-2.

Review Changes below

Original reference Data	Final reference Data	Source	Accept
Immediate delivery compared with expectant management after preterm pre-labour rupture of the membranes close to term (PPROMT trial): a randomised controlled trial	Immediate delivery compared with expectant management after preterm pre-labour rupture of the membranes close to term (PPROMT trial): A randomised controlled trial	Casing	<input checked="" type="checkbox"/> <input type="checkbox"/>
2015	2016	PubMed	<input checked="" type="checkbox"/> <input type="checkbox"/>
90	52	PubMed	<input checked="" type="checkbox"/> <input type="checkbox"/>

Edit Reference

Ask Author

Accept Changes

All changes are presented for review

Raise query to get author confirmation

FUNDER REGISTRY VALIDATION
Connect research funding to their outcomes by linking funding information to publications



Step 4

Intelligent queries

Clarity through context

Context-based queries for author confirmation/approval

AC Kriya (PREEDITOR) Apr 21 2021 11:34 AM

Please provide an in-text citation for reference Armstrong, 2003.

[Cite Now](#) [Delete reference](#)

Armstrong A. Foucault and the question of autonomy. Paper presented at the Australian Society for and, St Lucia, 20 November 2003. <https://espace.library.uq.edu.au/view/uq:424242>

selth LA. 2016. A novel class of Hsp90 C-terminal modulators induction of a heat shock response. *Prostate* **76**:1546-1559.

Asangani IA, Dommeti VL, Wang X, Malik R, Cieslik M, Yang R. 2014. Therapeutic targeting of BET bromodomain proteins in castration-resistant prostate cancer. *Nature* **510**:278-282.

Bairati J, Meyer F, Fradet Y, Moore L. 1998. Dietary fat and advanced prostate cancer. *The British journal of urology* **150**:1271-1275. PMID:<https://pubmed.ncbi.nlm.nih.gov/pubmed/9507851>

Queries for missing elements and unlinked objects/citations

AC Kriya (PREEDITOR) Mar 15 2021 2:56 PM

Please note that Table 1 is cited in the text but does not appear in the content. Please provide the complete details for this Table 1 or delete the citation.

[Link existing](#) [Add new](#) [Not a link](#)

AC Kriya (PREEDITOR) Apr 21 2021 11:34 AM

Please provide an in-text citation for reference Armstrong, 2003.

[Cite Now](#) [Delete reference](#)

AC Kriya (PREEDITOR) May 3 2021 5:45 PM

Please provide an in-text citation for reference Castells M, 2005.

[Cite Now](#) [Delete reference](#)

Step 5

Metadata addition

Supercharge your content

Metadata

supplement
Additional supplemental material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/kryadocs.2021.0001>).

Handling editor
John Greene

Acknowledgements
The authors wish to acknowledge the work of the Ministry of Health staff involved in this study for data collection and processing.

Contributors
TA led the development of the methods, application of the methods, drafted earlier versions of the manuscript and contributed to the final version of the manuscript. SF provided technical input to the development of the methods, drafted and edited earlier versions of the manuscript, and contributed to the final version of the manuscript.

Funding
This study was funded under an award from ABC Philanthropies to the University of Melbourne to support the Data for Health Initiative.

Disclaimer
The funders had no role in study design, data collection and analysis, decision to publish or preparation of the manuscript.

Patient consent for publication
Not required.

Ethics approval
Ethics approval was not required because data collection formed part of ongoing routine work by federal government staff. We did not involve patients or the public in the design, conduct, or reporting of the research.

Data availability statement
All data relevant to the study are included in the article or uploaded as supplemental information.



WYSIWYG
rich text editor

Updated metadata gets saved in XML in the correct format



Submission
metadata

Read from submission systems and update standardized statements



Subject areas
and topic codes

Map category-specific codes to facilitate discoverability of digital content



Step 6 Language refinement

Clear and concise

Catch spelling errors and American/British variants

Disclosure play a role in exacerbating adverse mental health outcomes. We applied an in-depth qualitative timeline method to plot the chronological relationship of key traumatic events, interpersonal reactions to disclosure and the mental health of the girl or young woman over her lifespan. Participants were women attending a hospital-based sexual assault counselling service in Sydney, Australia.⁸

Write or paste your text here too have it checked continuously. Errors will be underlined in different colours; we will mark spelling errors with red underlines. Furthermore grammar errors are highlighted in yellow. LanguageTool also marks style issues in a reliable manner by underlining them in blue. did you know that you can see synonyms by clicking on a word? Its an impressively versatile tool, e.g. if you'd like to tell a colleague from overseas about what happened at 5 PM in the afternoon on Monday, 27 May 2007.

There is ample evidence that sexual abuse is widespread globally report exposure to sexual abuse in childhood exposure to sexual abuse and the occurrence of a witness, particularly related to depression, post-trauma term.³⁻¹⁰ Whereas many women are resilient and that at the risk of such adverse outcomes following adult public mental health programs aiming to improve it that girls and young women who disclose sexual abuse receive support in a manner that increases their security and safety.

Redundant phrase X
This is redundant. Consider using "PM".

PM

Ignore suggestion

Ignore all

Catch grammatical and style errors

Furthermore • Punctuation error

error's • Extraneous apostrophe

in a reliable manner • Style

did • Grammar and others

sea • Possible word confusion

double clicking • Grammar and others

Its • Possible typo

Short, meaningful explanations for errors

Step 7 Real-time proofing

Pitch perfect pages

Clinical science

Table 1 Distribution of Lens Opacities Classification III (LOCS III) nuclear opacities and their correlation with NO and NC (n=120)

Grading	NO	NC
1.0-1.9	26	7
2.0-2.9	5	7
3.0-3.9	19	7
4.0-4.9	10	7
5.0-5.9	10	7
6.0-6.9	3	7

region selection method has an advantage in portraying the morphological characteristics of the whole nucleus. Moreover, it theoretically diminishes the subjectivity of observer-defined action owing to the identifiable contour of lens nucleus.

There were strong correlations of SS-OCT Nuclear Density with LOCS III NO (r=0.831, P<0.001) and NC (r=0.873, P<0.001). Lower correlations of nuclear density indices based on other OCT images with LOCS III nuclear grading scores were reported.^{18,19} Makhorkina et al.¹⁹ quantitated the nuclear density using AS-SS-OCT image, which showed an area of highest sensitivity located in the anterior half of nucleus, where they decided to define a rectangular ROI. And the AS-SS-OCT image-based nuclear density showed lower correlations with NO

Catch issues in table column alignment and base alignment

Please use Adjust Table option to fix column width

NUMBER OF LINES IN HEAD PARA ON WHICH REFLECTS SHORT COLUMN

Summary section head?
Clinically, light scattering caused by the lens can be utilized to assess the extent of its opacities. According to the direction of scattering, the methodology is generally divided into two categories: the approaches for forward scattering analysis and backward scattering analysis.² The former category includes the computer-assisted psychophysical method that requires the cooperation of participants in a subjective manner,² and the double-pass system that provides the objective measurement.¹⁴ They detect the intensity of straylight by analyzing the retinal image quality. Previous studies have investigated their efficacy in evaluating lens opacities,^{2,14} and in acting as the decision-making tool for surgery.

On the other hand, the backscattering was typically analyzed using anterior segment imaging tools, such as a commonly used subjective method in Lens Opacities Classification System III (LOCS III),³ which is currently thought of as the golden standard. In this process, the features of lens opacities should be recorded by an observer with display photographs first, and compared with those described as the standard reference pictures later to estimate the type and severity of cataract. However, the examiner's proficiency in performing this grading system, in addition to the display settings, may have an influence on its reproducibility.^{11,12}

Alternatively, the anterior segment image analysis based on tomography systems, such as Scheimpflug principle and optical coherence tomography (OCT), was able to estimate the magnitude of backscatter¹³

This file has missing entities issue

lens nuclear opacity is a function of the progression of lens nuclear opacity as well as the prediction of ultrastructure during phacemulsification, the main part of lens that is extracted.²

based on tomography systems, such as Scheimpflug principle and optical coherence tomography (OCT), was able to quantitate the magnitude of backscatter to objectively assess lens opacifications, particularly the nuclear opacity.^{1,3,14-21} Pentacam (Oculus, Wetzlar, Germany) is a 3D anterior segment tomographer using Scheimpflug principle. Its built-in function, Pentacam Nuclear Staging (PNS), is a densitometry for quantitating nuclear opacity using Scheimpflug images captured by the device.¹⁷

A few studies reported the nuclear opacity measurements using OCT images.¹⁸⁻²¹ A novel long-range swept-source OCT (SS-OCT) biometer, IOLMaster 700 (Carl Zeiss Meditec AG, Jena, Germany), was recently launched. It is able to

Catch errors in adding correct font for entities

Built-in validation

Cross check proof quality

Rule based templates

Automatic sizing and placement



Step 8

XML validation

Test your tags

Check conformity with PMC guidelines

Validate against customer specific rules

Probe Validation for kriyadocs.2021.0001

DTD-Validator PMC-Validator Probe-Validator

Count : 20

Rule ID: r007	Always has XXX prefix (10.7554/XXX.) followed by same 5 digit number as publisher id.
Signoff allow: false	TEXT: 10.7554/54927
<code>/article/front/article-meta/article-id[2]</code>	
Rule ID: r057	Article type "research-article" mismatch with subject.
Signoff allow: false	TEXT: research-article
<code>/article/@article-type</code>	
Rule ID: r060	Article @subj-group-type='heading' name mismatch.
Signoff allow: false	TEXT: field
<code>/article/front/article-meta/article-categories/subj-group[2]/subject</code>	

Identify XML syntax errors

Step 9

Accessibility improvement

Expand your reach

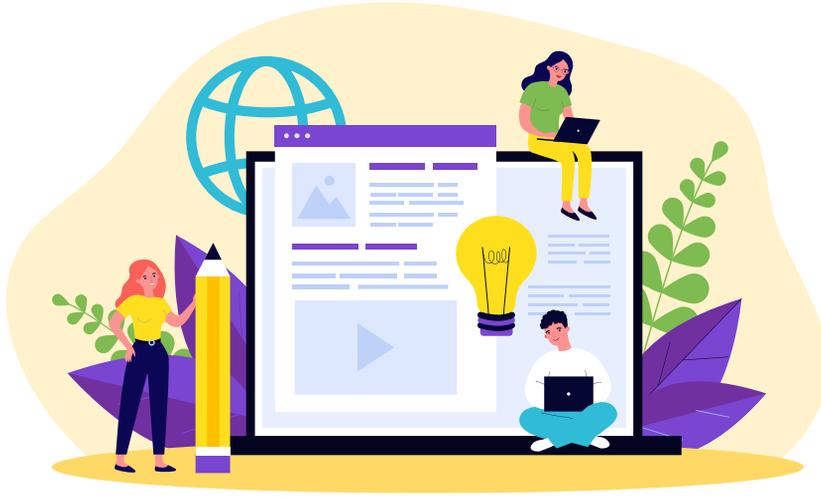
Add alt text and long descriptions (ATLD) in the editor interface

Export ATLD with various online outputs

Validate and update accessibility-related metadata

Key benefits

Measurable and meaningful outcomes



INCREASED CONSISTENCY

Consistent and accurate outputs on every export

REDUCED PRODUCTION TIME

Automation and stringent validation across different stages

ENRICHED METADATA

Improve attribution, discoverability and searchability

IMPROVED ACCESSIBILITY

Disseminate content to a wider audience



Unchain yourself from the desk. Get work done on-the-go with a full featured toolset at your fingertips.

ENABLE

Effortless collaboration.
Empowered teams.



Intuitive user interface



Kanban lanes



Centralized communication



Actionable dashboards

ENHANCE

Adaptable workflows.
Rich content.



AI driven templates



XML-first workflows



Integrated CMS & DAM



Multilingual support

ENSURE

Smart automation.
Stringent validation.



Automated data validation



ML driven editing



Smart query resolution



Role & element level security

EXTEND

Repeatable processes.
Quick monetization.



REST API integration



Dynamic workflows



Customizable business rules



Rich metadata enablement

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