

# Roles and Functions of a Non-Academic Medical School Facebook Page from the Student Perspective: A Study of Usage and Survey Data

Qi Zhuang Siah,<sup>1</sup> Ella Sykes,<sup>1</sup> Caitlin Golaup,<sup>2</sup> Julie Browne.<sup>3</sup>

## Abstract

**Background:** Facebook is a well-established social network that is commonly used by medical schools as an educational resource, but there are few studies assessing the roles of non-academic Facebook pages in medical education. Cardiff University uses Facebook primarily as a student support and engagement platform through its 'C21' Facebook Page. This study aimed to explore the use of the page by students, as well as their perceptions on the value of the page and the appropriateness of social media use by the medical school. **Methods:** Authors collected and analyzed C21 Facebook Page usage data to obtain descriptive information on reach, engagement and content. They also distributed an anonymized survey to evaluate and explore users' interest in, experience of, and engagement with, the content. **Results:** Of the 1021 posts on the page in 2019, the highest post-engagement rate occurred in the *Student or Staff News* category (13.5%) and the lowest in *Medical Research News* (3.5%). The survey feedback was overwhelmingly positive (n=89; 84.8%), and respondents reported a high degree of trust (n=95; 90.5%) in the page. Students would like to see more 'Curriculum Vitae (CV)-building' *Opportunities* advertised on the page. **Conclusion:** The C21 Facebook Page is an important resource in developing a sense of community within the medical school and facilitating student engagement with both the C21 course and wider medical opportunities. It is perceived as an appropriate channel of communication between the medical school and students.

**Key Words:** Social Media; Medical Education; Social Support; Medical Faculty; Medical Students (Source: MeSH-NLM).

## Introduction

In the 21<sup>st</sup> century, Social Networking Sites (SNS) play an enormous role in the way we communicate and learn.<sup>1</sup> Facebook is one of the most well-established SNS across the globe. Registering just under three billion active users as of the second quarter of 2021,<sup>2</sup> it serves as a valuable tool for knowledge exchange. Official institutions often use Facebook to publish and disseminate content to wide audiences.<sup>3</sup> Facebook pages have thousands of followers, but their reach may stretch far beyond their immediate followers as posts are widely 'shared' and 'liked'.

In February 2012, the *Cardiff University C21 Facebook page* (C21 FBP) (<https://www.facebook.com/CardiffC21/>) was founded by medical students at Cardiff University as a forum for undergraduates to discuss the upcoming implementation of a new MBBCh curriculum, known as C21. In May 2012, student administrators requested staff assistance with answering questions requiring official input. Today, C21 FBP has evolved into an established resource with a following of 3,002 (as of 20 December 2020) current, former and prospective students,

parents, and faculty members. Posts are curated by a Cardiff University staff member, who oversees the page, and seven trained student administrators. Contributors to the page are advised that posts should be 'fun, educational, diary-related, current affairs or celebrating staff and student achievement'. Notably, the C21 FBP does not use Facebook's 'boost' function to increase reach or engagement of posts, as its administrators work on an entirely voluntary basis, and there is no funding available for the purposes of 'boosting' posts. Boosting is an advertising option offered by Facebook to further promote the content of the page to a wider audience beyond the usual followers.<sup>4</sup>

Previous papers on Facebook use within the medical community mainly focus on educational outcomes pre- and post-Facebook use. They assess the role of Facebook as an educational resource in three categories: stimulation of subject discussion, delivery of formative assessment, and supplementary teaching content.<sup>3,5-11</sup> Facebook groups and pages have been shown to enhance students' learning experiences and positively influence educational interactions between students and instructors,<sup>11-13</sup> as well as promoting digital professional development.<sup>14-16</sup>

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The C21 Facebook Page in this study is not academically-oriented – that is to say, while it carries scholarly content, it is not used as a platform for instruction or study guidance – and is better described as a student support platform. There are few existing studies which assess the potential role of non-academic Facebook pages for medical institutions; Nicolai et al reported in depth on the use of Facebook groups by medical students,<sup>17</sup> but there was no active involvement of medical faculty in the groups they studied. Our work builds on their conclusion that ‘universities could feed relevant information to [student Facebook] groups, increasing their reach and interacting more closely and directly with their students’, by exploring the functions of a page where medical school faculty collaborate with students on SNS.

Although there is an existent body of literature describing the use of social media by academic organisations, research into the perspectives of those using these platforms is limited. In March 2020, Eaton et al called for qualitative inquiry into the experiences of users of professional organisations’ Facebook pages,<sup>18</sup> our study answers this call by combining analytical page data with input from current users on how they perceive and engage with one such page, the C21 FBP.

In this study, we assess the functions of the C21 FBP. Our primary aim is to explore how it is used to provide social and subject-related support, advice and digital professional development to students, and how this is perceived by page users. The secondary aim is to address the appropriateness and value of Facebook use by a professional organisation such as a medical school.

## Methods

As this study is directly aimed at practical questions with the aim of improving or enhancing a service, we took a pragmatic approach to data collection. We made use of readily available monitoring data on frequency and scope of page usage, along with a survey aimed at producing richer, descriptive data to supply insights into how student users perceive the page and what effects it might have on their engagement with the Cardiff MBCh courses. Ethical approval was waived by the School of Medicine Ethics Committee of Cardiff University School of Medicine.

### Phase 1

The first part of our study explored how frequently C21 FBP was used and if there were patterns in the data indicating user preferences for certain material. User engagement data for the period January 1<sup>st</sup>, 2019 to December 31, 2019 was extracted from the page on May 8<sup>th</sup>, 2020 using Facebook’s ‘Insight’ function. Posts were sorted into six categories: *Opportunities, Health News, Medical Research News, Student or Staff News, Dates for the Diary* and *Other* (e.g. *Congratulations, greetings*). For each category, data on the total number of posts, total page users who had posts enter their screen (*Reached*) and total number of engagements (likes, comments, shares and clicks) (*Engagement*)

was extracted. We used the relevant data to calculate average reach, average engagement and percentage of average engagement (*average engagement/average reach*) for each category.

### Phase 2

In the second part of the study, we used an anonymized survey (*Supplementary Material*) to gain insight into the experiences and perceptions of C21 FBP users, and to explore views on its appropriateness and value. Survey methodology was chosen as this research is a follow-up to a 2015 pilot survey study of the C21 FBP, with the hope to compare findings.<sup>19</sup> We used secure Cardiff University software to develop the survey, using a mixture of set response, scaled, and open-ended questions. It was advertised to the student body via the C21 FBP itself, through email and via Cardiff University’s eLearning platform. Posters inviting responses to the survey were also displayed in student areas such as libraries and common rooms. To be included, the respondent must simply be a user or follower of the C21 FBP. The inclusion criteria were set broadly in the expectation that response rates would be low and respondents would consist almost entirely of current Cardiff University medical students, which subsequently proved to be the case. We excluded any respondents who were not followers of the page or who had not been aware of the page before completing the survey, or who had no connection to Cardiff University School of Medicine. A separate section at the end of the main survey invited responses from those that were current Cardiff medical students.

In line with principles of parsimonious analysis, apart from asking for participants’ role (and confirmation that they were Cardiff students and details of their year of study), demographic data were not collected. Age, gender, and ethnicity were not considered to be relevant to our research questions. Data collection was carried out between January and March 2020. Then, the data was extracted and analyzed thematically (through a process of coding and inductive theme generation) to provide descriptive results. In order to minimise the risk of bias and to maintain objectivity in the data analysis, frequent meetings of the research team were held in which issues of interpretation and potential bias were resolved.

## Results

### Phase 1

There were 1021 posts on the C21 FBP between January 1 and December 31, 2019. These were categorised and counted based on the content of the post (*Table 1*).

We also collected *Reached* and *Engagement* data for each category. The percentage of average engagement was highest in the *Student or Staff News* category (13.5%). Full results for *Reached* and *Engagement* are displayed in *Table 2* and *Figure 1*. At the end of December 2019, the page had cumulative likes of 2593 and an average daily total reach of 1622. The lifecourse of the C21 FBP is depicted in *Figure 2*.

**Table 1.** Type and Number of Posts on the C21 FBP in 2019.

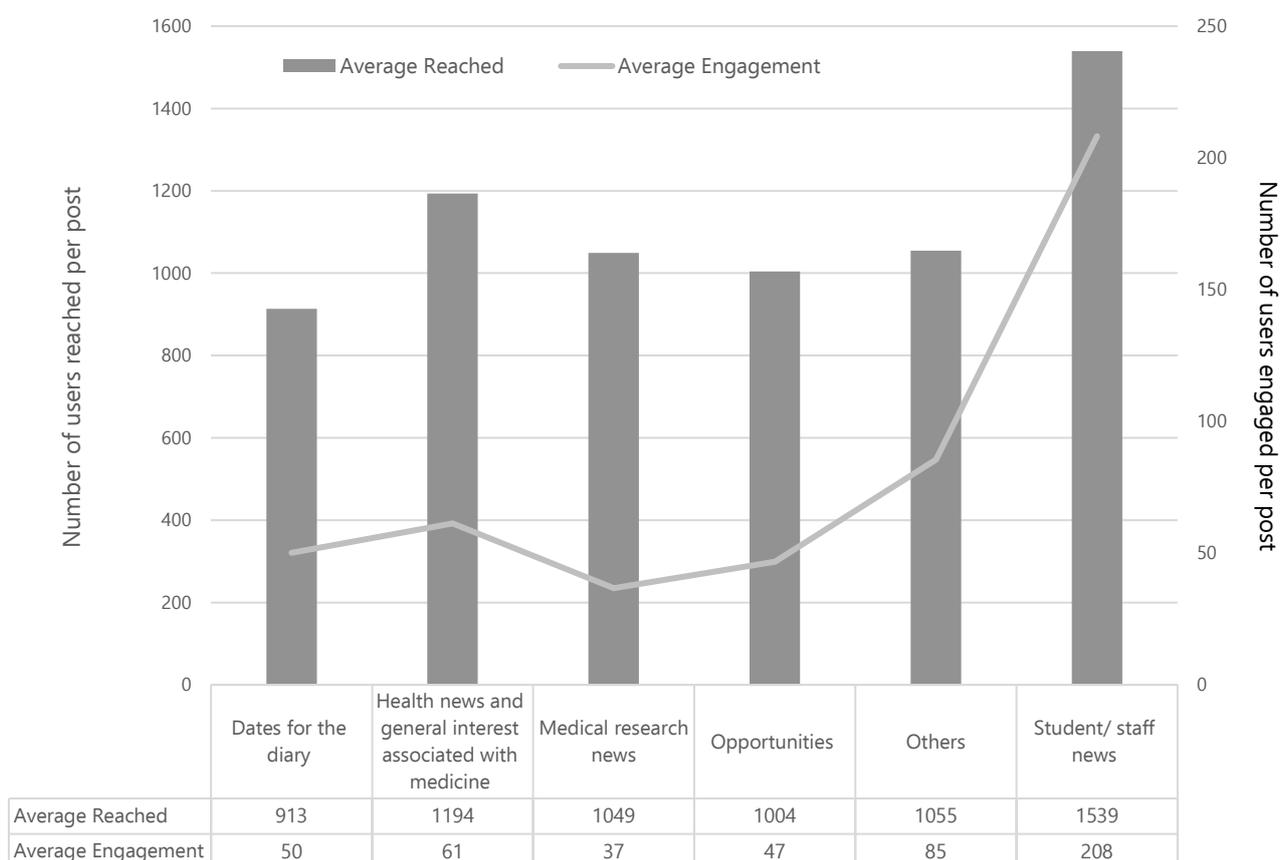
Type of post	Number of posts made	Percentage (%)
Dates for the diary	112	11
Health news and general interest	226	22.1
Medical research news	129	12.6
Opportunities	206	20.2
Other	199	19.5
Student/staff news	149	14.6
<b>Total</b>	<b>1021</b>	<b>100</b>

**Phase 2***Demographics of respondents*

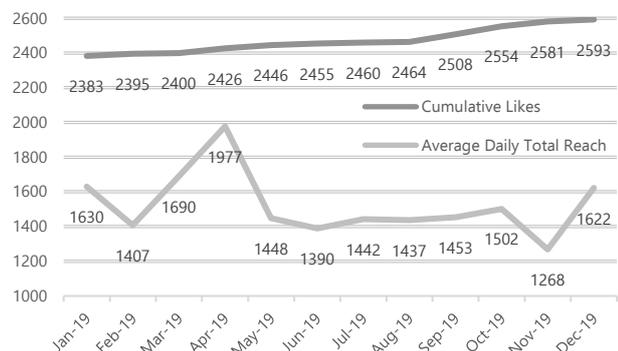
There were 120 respondents to the survey; 117 were current Cardiff University medical students, 2 were Cardiff University staff and 1 was a prospective medical student. Currently, Cardiff University School of Medicine hosts around 1,000 undergraduate medical students and approximately 1,100 postgraduate medical students. Since the survey was anonymised, the level of qualification was not provided by the respondents. Therefore, the response rate of our survey ranged from 5% to 10% since our target population was current medical students.

**Table 2.** Reached and Engagement Data per Post.

Type of post	Total reach of all posts	Total engagement with all posts	Average reached	Average engagement	Percentage of average engagement / average reached (%)
Dates for the diary	102309	5618	913	50	5.48
Health news and general interest	269801	13842	1194	61	5.11
Medical research news	135345	4733	1049	37	3.53
Opportunities	206800	9616	1004	47	4.68
Other	209927	17014	1055	85	8.06
Student/staff news	229353	31025	1539	208	13.52

**Figure 1.** Average Users Reached and Engaged per Post.

**Figure 2.** Cumulative Likes and Average Daily Total Reach of the C21 Facebook Page.



Fifteen respondents had 'never heard of' and were 'not following' the C21 FBP and therefore, were not eligible to complete the remainder of the survey. As such, all subsequent analysis used a total participants number of 105.

*Interest in posts on the page*

Using the categories of posts identified in Phase 1 of our study, we asked respondents of the type of post on the C21 FBP that interested them most. The results (Figure 3) show that interest is spread across the different types of posts on the page, with *Opportunities*, *Health News* and *Dates for the Diary* all amassing greater than 20% of responses.

*Engagement with the C21 FBP*

Posts from the C21 FBP are seen once a week or more frequently by 76.0% (n=80) of respondents. Of the remainder, 11.0% (n=12) see posts once a month, 6.0% (n=6) less than once per month, and 7.0% (n=7) reported seeing no posts at all from the C21 FBP, despite being followers.

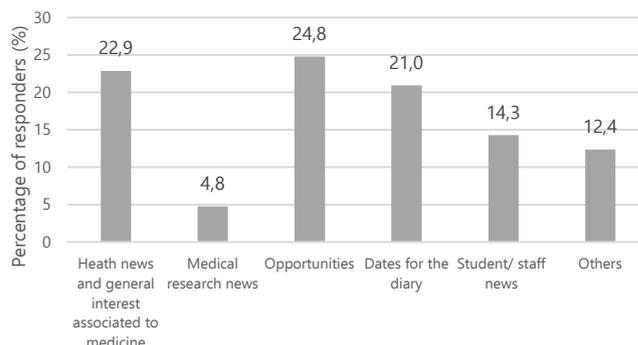
Respondents were able to select one or more ways in which they engaged with the C21 FBP. Liking a post on the page was the most common form of engagement, with almost three-quarters of respondents (n=77; 73%) having done so. Results are summarised in Figure 4. *Other* in our Figure 4 refers to activities which are not described by the remaining selections, including tagging others in the comment section.

*Trust in the C21 FBP*

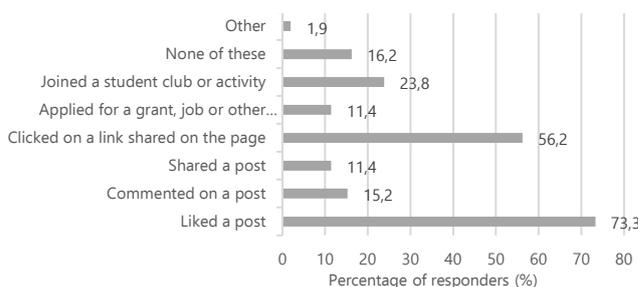
The 2015 study found that "a significant minority of survey respondents had used the page to complement their offline behaviour"; therefore it was felt to be important in this new study to explore the degree to which respondents felt that information on the pages could be trusted.<sup>19</sup> Respondents were asked to rate, on a five-point scale, how far they agreed with the statement, 'the information provided by the C21 FBP is trustworthy'. The majority of respondents (n=95; 90.5%) agreed or strongly agreed, whilst 2.9% (n=3) disagreed or strongly disagreed.

Current Cardiff medical students responding to the survey were also asked to rate their agreement with the statement, the information

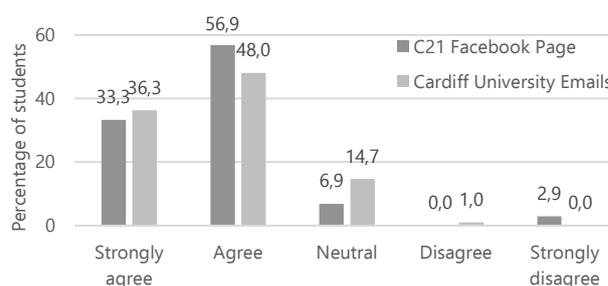
**Figure 3.** Page User Interest in Different Types of Post.



**Figure 4.** Type of Engagement with Posts by Page Users.



**Figure 5.** User-rated Trustworthiness of Information on the C21 FBP Compared to University Emails.



provided by the regular emails from Cardiff University is trustworthy'. Again, most (n=86; 84.3%) agreed or strongly agreed, with only 1.0% (n=1) disagreeing or strongly disagreeing (Figure 5).

*Satisfaction with the course*

Using the five-point scale as above, current Cardiff medical students were asked to rate how far they agreed with the statement 'I am more satisfied with the C21 medicine course after interacting with the C21 FBP'. There was strong agreement from 10.8% (n=11) of respondents, with a further 25.5% (n=26) agreeing. The majority of respondents (n=54; 52.9%) were neutral on the statement.

*Appropriateness of social media use by the medical school*

This was an area of enquiry that had not been explored in the earlier study but was felt necessary in view of recent public

discourses around Facebook. All respondents were asked whether or not they felt it was appropriate for the medical school to interact with students/prospective students/graduates via the C21 FBP. Overall, 82.9% (n=87) agreed or strongly agreed that it was appropriate, compared with 4.8% (n=5) who disagreed or strongly disagreed.

#### *Content of the page*

When asked what they would like to see more of on the C21 FBP, the most frequently mentioned theme was *Opportunities*, particularly those relating to research or other 'Curriculum Vitae (CV)-building' activities, followed by *Events* and *Dates for the Diary*. There was also a call for more student-oriented content and better representation of the student body, as well as for revision materials and resources to be published on the page.

When asked whether or not there was anything they would like to see less of on the C21 FBP, 13.3% (n=14) of respondents provided an answer. These included news articles which some perceived as '*random*', '*spam-like*' and '*biased/misleading*'. Others (n=4) highlighted '*memes/comedy posts*' as unnecessary on the page.

#### *Feelings towards the C21 FBP*

Respondents were asked to describe the C21 FBP in a single word. Our thematic analysis found that the majority of words chosen were positive in sentiment (n=89; 84.8%)- '*informative*', '*interesting*', and '*useful*' were those most commonly mentioned.

A minority of respondents (n=4; 3.8%) selected a word which we broadly classified as 'negative'; these included '*chaotic*' and '*insufficient*', although the latter may have indicated that the respondent wished for more content rather than that the existing content was weak.

Further comments or thoughts about the C21 FBP were provided by 12.4% (n=13) of respondents. These were varied, but universally positive in nature. Several respondents commented on the value of the page to them as students and felt that it should be advertised more in order to reach as much of the medical student body as possible.

*I think it's a valuable page and I enjoy seeing posts'*  
*It's great! Definitely keep an eye on it to know what's going on'*

#### *Appropriateness of social media use by the medical school*

One-fifth (n=21) of respondents commented on the appropriateness of social media usage by the medical school. Over half (n=13; 62.0%) of these were positive and reflected a feeling that social media provides an efficient and accessible way of sharing information with students.

*I think social media alongside the medical school is incredibly important in bridging the gap of how students view information. Most students spend most of their time on social media.'*

*I think it makes information hugely more accessible'*

Six respondents felt that medical school social media use was appropriate only under certain conditions. Maintenance of professionalism, vetting of content, and acquisition of consent before posting about individual students, were all regarded as important prerequisites for appropriate use of social media by the school. It was felt that critical, 'need-to-know' information was better shared using traditional formal communication methods (e.g. email) than via social media.

*I think it's very appropriate to engage with social media as most young people engage with it, as long as the content is vetted, reliable and doesn't share personal information without consent. It is more useful to have the page than a physical newsletter as people won't really read that.'*

*It is good for sharing student news and interesting news articles, but I wouldn't like it if they used it for more formal communications.'*

## Discussion

### **How social media is used to provide resources, support and professional development**

The C21 FBP promotes student engagement with the Cardiff Medicine course; 23.8% of respondents had joined a student club or activity because of a post on the page, and over one third agreed that their satisfaction with the course is increased by interaction with the Facebook page. Survey respondents were also keen for more revision material to be shared on the page. This indicates that the C21 FBP is a useful academic resource for students.

Our findings also show that the C21 FBP plays a role in developing a sense of community within Cardiff School of Medicine. Posts announcing *Student or Staff News* have the highest reach and engagement rates of all categories; students use the page to keep abreast of and celebrate the successes of their peers. This is consistent with the analysis of Eaton et al,<sup>18</sup> who reported that Facebook groups can be used to openly share motivation and social support for colleagues, and so foster professional and personal social cohesion. The C21 FBP also promotes student participation in university activity beyond the confines of online networks; more than one in five respondents to our study had joined a student club or activity advertised on the page. Sense of involvement in a community, both virtual and in-person, has been an important factor in social identity formation<sup>20</sup> and the C21 FBP helps to facilitate this.

In addition, the C21 FBP allows professional development and engagement with medical professionals beyond the confines of the medical school. Medical research news and opportunities posted on the page, for example, are able to reach thousands of medical students. Although the percentage of average engagement with these posts is low (3.5% and 4.65% for *Medical Research News* and *Opportunities*, respectively), we believe this reflects the wide reach of the posts relative to the usual specialist appeal of opportunities advertised, such as prizes, competitions, or bursaries. Indeed, *Opportunities* were the most frequently cited category of post that students wanted to see more of on the page, suggesting that – although they rarely engage with the

posts themselves – students benefit from viewing opportunities advertised as this increases the likelihood of one being applicable to them. More than one in ten respondents had applied for a grant, job, or other opportunity advertised on the page. Several papers have reported on the use of social media to facilitate professional development and networking between physicians, and the opportunities online communities present for collaboration beyond the confines of geographical location.<sup>21,22</sup> Our study suggests that the same is true for medical students who, despite being earlier in their medical careers, use social networks such as the C21 FBP to engage with an established network of physicians who will eventually become their professional colleagues.

### Interest in and perception of the C21 FBP

With the exception of *Student and Staff News*, engagement with posts of all categories on the C21 FBP is consistent and page users show no consensus when asked which type of post on the page interests them most. This broad spectrum of engagement and interest reflects the diversity of the page audience and suggests that there is variance in the ways that individuals use the page.

Despite, and perhaps by virtue of, the heterogeneous nature of the C21 FBP, students overwhelmingly perceive it positively. It is clear that universal satisfaction with the page will never be a reality- respondents simultaneously described the page as 'varied' and 'chaotic', and some suggested that they wanted to see less 'medical school gossip' and 'gossip is good stuff'. These incongruities may be viewed as an irreconcilable failing of the page, or another marker of its broad appeal; students who characterise the page as 'informative' and 'interesting' do not seem to be deterred by posts on the page which are not directly relevant to them. One of the documented strengths of social media is users' ability to self-select the content that appeals to them in order to create a 'Personal Learning Environment' which suits their individual learning and professional development needs.<sup>23</sup>

Our study results show that trust in the C21 FBP is high. This high degree of trust is important in maintaining the professional nature of the page and ensuring that it is aligned with the wider professional image of the School of Medicine. Trust in the information provided by the page is comparable to that in the information provided by Cardiff University emails, indicating that students perceive the Facebook Page as a legitimate extension of the core university communication channels. A minority of students commented on the occasional sharing of 'biased/misleading' news articles on the page. This, in spite of careful staff oversight and rigorous systems to ensure that articles are as objective as possible, is likely to arise from the breadth of the content rather than inaccurate information.

### Appropriateness of social media use by medical schools

Majority of survey respondents felt it was appropriate for Cardiff School of Medicine to use social media to connect with students. This perhaps reflects the widespread use of social media. With networks such as Twitter and Facebook already used widely by healthcare professionals and organizations, social media is

increasingly perceived as a legitimate means of professional knowledge sharing, and thus students find it appropriate for the medical school to participate in this.<sup>24</sup> The efficiency and accessibility of social media makes it an expedient channel of communication from the perspective of medical students.

There were some concerns that this expediency carried potential risks such as failure to maintain professional boundaries by faculty members and students, and concerns that the C21 FBP might be used as a sole means for sharing essential information. Although these risks are perceived rather than real, they are consistent with previous studies which have cited privacy concerns, unprofessional and unethical behaviour, and inconsistencies in degree of student engagement as potential challenges of the use of social media in medical education and professional development.<sup>21,25-27</sup> It will be the task of the C21 FBP to continue to reassure users that it is well-run and that all risks to quality have been eradicated, mitigated, or controlled for.

### Limitations

A limitation of our study is the low response rate (n=120; 8%) compared with the over 2500 page 'followers' who were eligible to take part. The small sample size means that there is potential for responder bias in our results; it may be that only those with strong feelings about the page responded and so our findings are not reflective of the wider page user-ship. However, the responses collected do not suggest that this is the case as most offered measured feedback on the page, with both praise for its strengths and fair constructive critique. Another limitation is that C21 FBP carries bilingual content (English and Welsh languages), but the survey was not offered in Welsh language. While we assume that some of the survey respondents were Welsh speakers, it was not part of the study aims to explore this specific group's views.

### Conclusion

This study has found the C21 FBP to be an important resource in developing a sense of community within Cardiff School of Medicine and facilitating student engagement, with both the C21 course and wider medical opportunities, and which page users value, trust and feel is appropriate. As such, the authors of this study feel the use of non-academic Facebook pages by medical schools to engage with students is beneficial and should be encouraged. Reflecting on the findings of our research, we make the following recommendations for the development of such pages:

1. The C21 FBP is seen as an optional supplement to the core communication channels used by Cardiff School of Medicine. **Medical school Facebook pages should not be used in favour of emails to disseminate important official information;** students prefer this to come from a traditional communication channel such as email.
2. C21 FBP users appreciate the diversity of content on the page but would like to see greater diversity of representation of the student body. Efforts should be made to **recruit student page administrators who are**

**representative of the diverse nature of the medical student body.**

- The posting of medical research posts, prize competition, jobs, and other opportunities is a key attraction of the C21 FBP for many users. As such, it would be of benefit for medical school Facebook pages to **focus on promotion of medicine-related opportunities.**
- The C21 FBP has a legitimate and trustworthy reputation. **Ensuring the validity and high scientific quality of news articles posted on university Facebook pages** is important to maintain a professional reputation. Careful oversight from qualified staff and effective collaboration between staff and student administrators is key to ensuring maintenance of quality.

Future studies investigating the use of non-academic Facebook pages by medical students would be useful to help support the limited body of evidence in this area. Such research would benefit from the recruitment of a larger group of participants and collection of further qualitative information on how pages are used by students, for example via focus groups.

## Summary – Accelerating Translation

The title of our study is “Roles and Functions of a Non-Academic Medical School Facebook Page from the Student Perspective: A Study of Usage and Survey Data”.

In February 2012, the Facebook page “Cardiff University C21” was founded by medical student representatives at Cardiff University with the aim of creating an official forum for undergraduates to discuss the implementation of the newly formed curriculum, “C21”. “C21” was due to substitute the traditional system in September 2013. This social media platform served as a potential medium for students to receive the latest information about curriculum changes at the beginning of the uncertain transition period. In May 2012, the student administrators requested representation from the School of Medicine on the Facebook page to help answer questions which required an official input. A case study was completed by Abreu and Stephenson in 2015 to explore the evolution and functionality of the “Cardiff University C21” Facebook Page. Their results showed that, initially, the Facebook page was not well received, but across a period of a few months it steadily garnered interest from the target audience. It is notable that a surge in the popularity of the page followed

the introduction of official School of Medicine input. The page recorded over 200 page likes in the first 15 months following its launch. With an effective advertising campaign employed by the new intake of student administrators in December 2013, the page surged in popularity, reaching almost 600 page users daily on average in April 2014. Further growth was observed after September 2014 after a further publicity drive. Overall, cumulative page likes quadrupled (800 page likes) over a period of two years. Abreu and Stephenson’s study also considered the use of the page by medical students. They found that students used the page to complement their offline behaviours, particularly through attending events advertised on the page and studying topics on the curriculum further as a result of Facebook Page posts. A majority (61.7%) of respondents to the 2014 study felt more or much more satisfied with the medical course as a result of using the page.

The rapid evolution of digital technology and social media in the five years since the original study means that it is important to assess how the role of the page, and student perception of it, may have changed over time. Our primary aim is to explore how social media (as a networked community) can be used to provide social and subject-related support and advice, and to promote digital professional development to students. The secondary aim is to address the appropriateness and value of Facebook use by a professional organisation such as a medical school.

We adopted a mixed method of analysis (quantitative and qualitative analyses) in this research. Our methodology encompassed two main phases. Phase 1 was quantitative-based, which also involved basic descriptive statistical analysis. In phase 2, an anonymised survey was distributed among potential respondents from January to March 2020. A thematic analysis was then conducted to qualitatively appraise the survey results.

The C21 FBP promotes student engagement with the Cardiff Medicine course; 23.8% of respondents had joined a student club or activity because of a post on the page, and over one third agreed that their satisfaction with the course is increased by interaction with the Facebook page. Our findings also show that the C21 FBP enables professional development and engagement with medical professionals beyond the confines of the medical school.

In conclusion, this study has found the C21 FBP to be an important resource in developing a sense of community within Cardiff School of Medicine and facilitating student engagement with both the C21 course and wider medical opportunities, which page users value, trust and feel is appropriate.

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No funding was utilized in the preparation of this paper. CG is the lead administrator of the Cardiff University C21 Facebook group in 2015 and was listed among the top 50 most influential higher education professionals using social media by JISC, a charity championing the use of digital technologies in the UK education and research. ES has been one of the page admins since 2018. QZS became an admin in August 2020, after the project ended, and so declares no conflict of interest. JB declares that she has no conflict of interest to disclose.

### Author Contributions

Conceptualization; Writing – Review & Editing: QZS, ES, CG, JB. Data Curation; Formal Analysis; Investigation; Software; Writing – Original Draft Preparation: QZS, ES. Methodology; Project Administration; Resources: QZE, ES, JB. Supervision: CG, JB. Validation: JB. Visualization: QZS.

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## Supplementary Material

*Distributed via Microsoft Forms between January and March 2020.*

1. Who are you?

- |  |                                    |           |
|--|------------------------------------|-----------|
| a. Current Cardiff Medical Student     | c. Cardiff Medical School Graduate | e. Parent |
| b. Prospective Cardiff Medical Student | d. Cardiff University Staff        | f. Other  |

2. Were you previously aware of, and do you follow, the C21 Facebook Page?

- |                            |                        |   |
|----------------------------|------------------------|---|
| a. Aware but not following | b. Aware and following | c. Not aware at all and do not follow -><br>DIRECT TO END OF SURVEY |
|----------------------------|------------------------|---|

3. How often do you read / see posts made on C21 Facebook page?

- |                         |                          |  |
|-------------------------|--------------------------|--|
| a. At least once daily  | c. At least once monthly | d. I do not see any posts from this page |
| b. At least once weekly |                          |  |

4. Have you ever engaged with the page in any of the following ways? (You may select more than one option)

- |                        |  |  |
|------------------------|--|--|
| a. Liked a post        | d. Clicked on a link shared on the page                                    | f. Joined a student club or activity advertised<br>on the page |
| b. Commented on a post | e. Applied for a grant, job or other<br>opportunity advertised on the page | g. None of these   |
| c. Shared a post       |  | h. Other   |

5. Which type of posts on the C21 Page interest you most?

- |   |   |   |
|---|---|---|
| a. Health news and general interest<br>associated to medicine | c. Opportunities (prize competition, research<br>posts, jobs, etc)  | e. Student news (achievements, extra-<br>curricular activities)               |
| b. Medical Research news                                      | d. Dates for the diary (Events and talks in your<br>medical school) | f. Others (good wishes, medical school<br>gossip, pictures and announcements) |

6. Is there anything you would like to see more of on the C21 page? \*Free text response\*

7. Is there anything you would like to see less of on the C21 page? \*Free text response\*

8. Below are some statements regarding the C21 Facebook Page. Please indicate how far you agree with each statement.

The information provided by the C21 Facebook Page is trustworthy.

Strongly agree      Agree      Neutral      Disagree      Strongly disagree

It is appropriate for medical school to interact with students/ prospective students/ graduates via C21 Facebook Page

Strongly agree      Agree      Neutral      Disagree      Strongly disagree

9. Please add any additional comments regarding the appropriateness of social media usage within medical school. \*Free text response\*

10. In one word, how would you describe the C21 Facebook Page? \*Free text response\*

11. Do you have any other comments or thoughts about the C21 Facebook Page? \*Free text response\*

### QUESTIONS FOR CURRENT CARDIFF MEDICAL STUDENTS ONLY

12. Have you ever studied a topic on the medical curriculum further as a result of a link on this page? a. Yes b. No

13. How far do you agree with the following statements?

I am more satisfied with the C21 medicine course after interacting with the C21 Facebook Page.

Strongly agree      Agree      Neutral      Disagree      Strongly disagree

The information provided by the regular emails from Cardiff University is trustworthy.

Strongly agree      Agree      Neutral      Disagree      Strongly disagree