MedCity and Future Funding Strategy – a briefing note for the AHSC Executive Confidential

Background

MedCity's longer term funding plan must be linked to the overall strategy for delivering its vision, that is, London and the Greater South East (GSE) to be a world leading, interconnected region for life science research, development, manufacturing and commercialisation - delivering health improvements and economic growth. In years 1 – 3, our strategy has been to meet demand by offering services, programmes and projects across 4 main themes.

Creating a 'front door' for businesses large and small, entrepreneurs, investors and academics.
Promoting the region as a base for life science investment and growth.
Encouraging and enabling entrepreneurialism by supporting the development of a business environment that supports life sciences and creating the ecosystem and a culture which encourages entrepreneurialism.
Explaining the market by articulating the offer to the market, working with the academic community to demonstrate our expertise.

Over the next 3-5 years, alongside the 4 main themes above, there are a number of key areas that we see MedCity playing a leading role:

- MedCity has recently concluded a formal agreement with Oxford and developed extensive relationships with Cambridge to extend the services, programmes and projects to this region.
- MedCity has taken on the operation of GMEC Management Company Ltd and has incorporated GMEC's activities into the MedCity brand
- There is a need coming from policy makers to ensure support and progress of **policy issues and recommendations** are evidence based. MedCity has already played a role in this area eg, GLA's work on the availability of capital for life sciences. We anticipate that MedCity's role will become more prominent in the next 3 years, in particular with respect to interpretation and implementation of the Accelerated Access Review and the Office of Life Sciences development of an Industrial Strategy for Life Sciences. MedCity's expertise in these areas as well as in Capital and Infrastructure development are vital.
- MedCity has the opportunity to play a leading role in joining up clusters such as NHSA, BIO Wales and Scotland to provide a national approach to policy input and support. This would enable joining up the national offer and European offer vis a vis rest of the world
- MedCity is giving professional sector specific assistance to UKTI adding concrete value to reputation and brand, this will continue and grow. See ** below.

In our experience, our credibility comes from having expertise and networks but also by being impartial, objective and free. As such, although we are exploring alternative funding streams we also need to balance this vis a vis successful industry engagement.

MedCity Offer	Which organisations do we support in providing the offer	Core funding	Potential supplementary funding
Creating a front door	GLA, Academia, NIHR, Investment firms, Trade bodies	GLA, HEFCE, *GMEC (tbc)**	*LEPs*, sponsorship (*Venture Capital firms, law firms etc) NIHR,*
Promoting the region	GLA, UKTI, NIHR, Academia	GLA, HEFCE, *DIT (tbc)***	*LEPs, NIHR, sponsorship*
Encouraging & Enabling Entrepreuneurialism	Innovate UK, NIHR, GLA, Academia, industry groups, NHS	GLA, HEFCE, ERDF *Innovate UK (tbc)*	*LEP, sponsorship*
Explaining the Market	Academia, NIHR, NHS, Innovate UK, UKTI, GLA	GLA, HEFCE, ERDF, DIT, GREAT campaign	sponsorship
Policy Support & Implementation	GLA, OLS, BEIS, Innovate UK, UKTI, NICE	GLA, *OLS/Innovate UK (tbc)*	*BEIS, Innovate UK, UKTI, NICE*

*There is an opportunity to generate revenue through our partnership with GMEC in time. This would be through MedCity front door and using our brand and expertise to attract and engage industry (see below for further detail).
** We are called on and funded by DIT (formerly UKTI) to promote life sciences through international visits (e.g. recently UKTI has funded MedCity to present at events in Italy and Russia). This is an opportunity for MedCity to extend DIT outreach in promoting life sciences capabilities, although DIT may only be prepared to fund the marginal costs and not core capabilities.

In the next 3 years, we see our efforts in growing the impact we have made in London and furthering the geographical scope of our work. As such, we see GLA to be pivotal amongst those funding our core operational costs, but it is clear that this will be to a lesser proportion than the contribution made in the first 3 years of MedCity's development (see below).

Current funding arrangements

MedCity is currently funded through 3 main sources:

- GLA core grant
- HEFCE Catalyst fund, which funds core running costs and the Collaborate to Innovate (C2N) seed fund
- ERDF, which provides match funding to the C2N programme

Funder	2016/17 amount	Comment
GLA	£393k	Slight decrease from 2015/16 of £400k
HEFCE Catalyst	£360k	Core running costs
HEFCE Catalyst	£250k	Seed funding (C2N)
ERDF	£250k	Match funding (C2N)
C2N programme has a total budget of £2.093m over the life of the programme 2016 – 2019 which is		

split 50:50 between Catalyst funding and ERDF

In addition MedCity has been successful in drawing in additional funding to support specific projects, e.g.

- In 2014/15 - £20k via London Business Angels of Capital for Enterprise funding to support Angels in MedCity
- In 2015/16 - £25k from AXA PPP to run the MedTechSouthEast industrial design in medical technology competition, run in conjunction with The Design Council
- In 2015/16 - £100k from the GREAT campaign, which was bid for and matched by MedCity/London & Partners and the Mayor's International Business Programme to support the Cell and Gene Therapy campaign
- In 2016/17 - £100k from DIT (UKTI), matched by MedCity/London & Partners and the Mayor's International Business Programme to support the Digital Health campaign
- GLA, UCL and GST Charity cofunded the MedCity report *Planning for Growth – Demand for Healthcare R&D Space in London* (£72k in total)

We have also been successful in levering much benefit in kind support:

- The MedCity and London Stock Exchange *Future of Healthcare Investment Conference* has been wholly sponsored by industry (2017 sponsors: JPMorgan, Numis, PwC and Pennington Manches)
- Angels in MedCity hosting and funding workshops and pitching events (FieldFisher; Bloomberg; J&J Innovations)

Negotiations with GLA on future funding

Negotiations are underway with the GLA to support MedCity from 1st April, 2017 onwards. The internal bid for funding, submitted to the Mayor by the Enterprise and Business Policy Unit has been communicated as:

Year	Amount
2017/2018	£500k
2018/2019	£375k
2019/2020	£295k
2020/2021 and thereafter	£200k

GLA has indicated that it will support MedCity at £200k per annum from 2021 onwards.

It should be noted that MedCity had bid for growth funding moving forward, to include:

- Funding a COO post (~ £68k per annum)
- Additional office costs, given that MedCity has had to secure larger offices (~£62k pa which is double what we are currently paying at LBIC)
- Support to the DigitalHealth.London (MedCity bid for £50k)

- Growth in the marketing and international visits budgets in order to support growth in representation and marketing into international markets in response to Brexit

What does MedCity need to operate effectively moving forward?

HEFCE will continue to fund MedCity core operating costs in 2017/18 and 2018/19 at approximately £380k p.a.

The table below provides an indication of MedCity's **ideal** level of funding across core cost groups:

Cost category	Indicative budget for 2017/18	Comment
Salaries and HR	£580k	
Office costs	£80k	Includes rent, equipment, software, insurances, legal etc.
Marketing	£35k	Website, marketing collateral, conference visuals and branding etc.
Communications/PR	£150k	Includes staff costs to support PR, Comms and some business marketing expertise
International meetings/missions	£50k	BIO USA, BioJapan, BioEurope etc plus supporting Mayoral international visits
Events and UK meetings	£50k	Our own events and participation in UK based meetings such as Genesis, Biotrinity etc.
Programme	£100k	Angels in MedCity and acceleration activities
DigitalHealth.London	£50k	Discretionary to support DH.L's 2017 plan
Total (ideal):	**£1.015m**	
Total (realistic):	**£950k**	Assumes no programme funding support to DH.L and reduction in communications costs
Shortfall in 2017/18	**£70k**	
Shortfall in 2018/19	**£185k**	
Shortfall in 2019/20	**£655k**	Assumes no further funding from HEFCE
Shortfall in 2020/21 onwards	**£750k**	

For simplicity, this paper considers a two-staged position. (i) The need to secure approximately £200k funding in 2018/19; (ii) the need to secure approximately £750k in 2020/21.

Options

MedCity started to consider options for alternative funding with the Advisory Board in 2015. The options considered are set out below:

(i) Membership model
(ii) Inward investment fees (success fee)
(iii) Subscription model
(iv) Sponsorship based model of operation (core funding or project based)
(v) Submission of new case for funding to LEPs (London and potentially others) and/or Government
(vi) Commercial activity
(vii) Combination of above

Each of these were considered by the Advisory Board and options (i) and (ii) were discounted as unsuitable or undesirable.

(i) Prior to MedCity's launch in April 2014, there was the suggestion that future funding streams may include **membership** income through provision of services to a membership clientele. Indeed, the application for HEFCE Catalyst funding stated that membership income would be secured. However, during the first year of operation, MedCity examined and ruled out this financial model on the grounds that a membership model would provide additional competition to the existing group of membership organisations, in a space that is already crowded and where there is already existing competition for members (BIA, One Nucleus, OBN, ABHI, Biotech and Money etc). Given the landscape, it is not clear that MedCity would be able to establish a form of membership operation that could be distinguished or distinct from that already being offered. Even if it could, MedCity's priorities would inevitably have to be focused on serving its membership and not on providing open access/free to use objective services, advice and guidance.

(ii) **The inward investment fee** model was also flagged as a potential source of funding within the HEFCE grant application. MedCity has also examined this approach and it is not clear how an inward investment fees system would work or how this would sit alongside the public good model offered by the FDI functions offered by London & Partners, inward investment teams within LEPs and/or DIT (former UKTI) at national level. Nevertheless, as DIT develops there may be opportunity to bid for project based funding, such as the successful support that has been secured in 2016 for the Digital Health Hub campaign, working in conjunction with London & Partners and the MIBP. It should be noted that collectively we have had to match fund the DIT contribution and this has not contributed any funding to fixed costs such as staff time or facilities.

(iii) A **Subscription** based could be considered as part of the funding mix moving forward. Subscription models are operated by a small number of organisations including Health Enterprise East and NCUB (National Centre for Universities and Business). This will be considered further below.

(iv) MedCity has had some small experience, and success, in securing **sponsorship** for activities. To date, we have tended to secure benefit in kind contributions and these have already been significant in relation to the operation of the Angels in MedCity programme. Sponsorship has also been secured, via our relationship with London Stock Exchange Group, for the Future of Healthcare Investment Conference(s), although this has not been administered through MedCity. We also successfully secured sponsorship from AXA for the Design Council/MedCity competition.

In follow up to the Advisory Board discussion, a piece of work was conducted to look at the sponsorship model in greater detail. A paper was presented to the MedCity management board in October, 2016 (appended and marked confidential). This work suggested that MedCity is highly unlikely to secure sponsorship for core running costs and that support packages were only likely to be secured to support specific, well defined programmes, such as Angels in MedCity.

(v) Given that MedCity's core purpose is to support economic development for the region, and given that its services and project are being provided as a "public good", there is an argument for **continued funding from Local Enterprise Partnership** sources. Oxford AHSC has recently joined MedCity as a member and this now provides an opportunity to engage with the Oxfordshire LEP to consider their willingness to contribute towards the operation of MedCity. With regard to Cambridge (GCGP LEP), although there is a strong relationship with the LEP, it may be more difficult to engage in substantive discussion until Cambridge University Health Partners (AHSC) makes a definitive (and positive) decision with regard to their membership of MedCity. However, there is a clear need for assistance from the GLA and/or reconstituted London LEP in terms of engagement with other LEPs. In our opinion, MedCity should help with, but not lead, engagement with other LEPs.

The development of a new industrial strategy in Life Sciences provides a new opportunity to explore with central Government the extent to which regional organisations may be eligible for financial support as part of the strategy, and/or as a delivery agent for programmes as part of the industrial strategy. At the time of writing (November, 2016) it is too early to determine the extent to which this provides a route for future funding. However, MedCity's Chair and CEO have recently met with Lord Prior (23rd November, 2016) to introduce MedCity and to discuss plans for the development of the industrial strategy and there is now a route to commence a dialogue on this subject.

MedCity has previously engaged with Innovate UK to explore their willingness to co-support programmes such as Angels in MedCity. To date no financial support has been forthcoming, but MedCity will continue to explore opportunities with Innovate UK, which are most likely to be project based, rather than providing core funding.

(vi) MedCity does not charge for any event or service that it provides, in line with its current funding model and its mission. MedCity is delivering mostly public goods which by their nature cannot readily be charged for. MedCity has already rejected the idea of a success fee based approach related to some of its activities, such as supporting inward investor enquiries and projects. Nevertheless, there may be some **commercial products and services** that could be developed that may contribute to MedCity's future operating costs. These might include running of life sciences incubation/co-location working spaces under the MedCity brand (not wet lab incubation however).

The question of commercial income for MedCity also needs to be considered in relation to the future operating model for London & Partners. L&P currently operates a partnership model where commercial entities (typically professional services firms such as recruiters, accountants, lawyers etc) pay a fee in order to appear on a register of recommended providers. This sits alongside their inward investment offer, so that inward investor clients are introduced to potential providers. This is a model which MedCity might be able to replicate in the future, however the following issues should be considered:

1. This approach would put us in direct competition with L&P - something we have sought to avoid.
2. We do not have a dedicated inward investment team – we tend to provide specialist advice and support to L&P or DIT projects. Consequently, our offer would typically be secondary to L&P's, or conflict with theirs.
3. Our volume of referrals may not be sufficient to generate interest from commercial players (L&P manages a much greater volume of inward investment activity, of which life sciences is a sub-set).
4. L&P has a dedicated commercial team to scout, negotiate and manage commercial relationships. MedCity would need to create this type of capability and would also potentially need to change its constitution from non-VAT registered, not-for profit company. MedCity has not yet taken advice on the consequences of this change in status.

Subscription model – further consideration

At present, MedCity's core funding is provided in part by an economic development (GLA/London LEP) and by higher education funding (HEFCE). Given that the HEFCE funding will end on 31st March, 2019,

there will be a need to determine replacement for this funding from this point – hence the need for ~ £750k from 1st April 2020.

If we assume that there continue to be 6 key academic institutions at the heart of MedCity's activity (Universities of Oxford and Cambridge; KCL, Imperial College, UCL and QMUL) and we assume that HEFCE no longer funds the HEI component, MedCity should ask the HEIs to subscribe to support MedCity. Alternatively, the subscription could be at the level of AHSCs (of which there are 5) but it should be noted that they are not legal entities and the AHSCs do not have any income in their own right.

Equally, we could also extend the subscription base to the LEPs surrounding London, drawing in others beyond Oxfordshire and GCGP (for example Hertfordshire and Kent).

This could provide a core base of subscribers of (say) 8 (2 non- London LEPs and 6 HEIs), with the possibility of other LEP subscribers. A flat rate subscription for 8 organisations would result in each paying approximately £94k each, with London HEIs collectively contributing £375k.

If MedCity could attract some core funding from central Government, the subscription level would be reduced.

MedCity has rejected a corporate sponsorship model, as this is effectively indistinguishable from the membership model. What is more, the difficulties associated with this type of funding model were further explored in the work undertaken by MedCity on industrial partnerships – see below. In practice, industry is unlikely to provide consistent financial support to an organisation like MedCity unless it receives something in return. It is unclear how MedCity could develop a distinct offering to industry for their subscription, given that this would in effect move us towards a membership scheme. It would also undermine one of our core values – *objectivity* – as association with certain industry players may discourage others from working with us. However, t is understood that the GLA may still be interested in exploring this model.

GMEC contribution and potential income

In October 2016 MedCity formally took on responsibility for running GMEC Management Company Ltd. GMEC is a not-for-profit company owned by the six Universities of the golden triangle (Universities of Oxford and Cambridge; KCL, Imperial College, UCL and QMUL) which provides a mechanism for industry to establish collaboration arrangements across all 6 member universities. GMEC currently has one industrial collaboration with Pfizer – a Rare Diseases Consortium. GMEC was established by the Universities and since its foundation it has been funded by the Universities to a total of £825k. These subscriptions are redeemable upon receipt of one month's notice to the extent that the company has adequate funds to meet its obligations. The repayment is also subordinated in favour of all creditors of the company. The member Universities have made it clear that they do not intend to subscribe further to GMEC, so the company must now operate through income generation. Consequently, there is a need to drive further industrial partnership activity to bring in more income.

GMEC now needs to move to a model where it generates sufficient income annually to cover its operating costs and to repay the Members. MedCity will be entering a services contract to allow it to operate GMEC and as a result will look to share some costs (accounting, company secretarial etc) and to recover costs associated with running GMEC. However, these are expected to be very small in the first instance (some contracts have already been renewed for the year ahead) and GMEC currently has very little overhead, no HR services, no office costs etc, so there is minimal scope to drive efficiencies through cost sharing. In 2017/18 the contribution to MedCity is likely to be a small contribution to office costs and some contribution to administration costs. Nevertheless, MedCity will continue to explore how GMEC income might in the future provide a greater contribution to MedCity's operating costs.

Beyond ERDF

MedCity has successfully bid to ERDF for matched funding support for its *Collaborate to Innovate* SME/University collaboration programme. In addition, MedCity is also a strategic delivery partner to the Health Innovation Network (South London AHSN) managed DigitalHealth.London Accelerator programme. MedCity had anticipated that some of its activities might be suitable for development into ERDF cofounded programmes in the future. However, given Brexit, it is now unclear whether similar funding schemes may be available in the future. Given the uncertainty, MedCity cannot plan for income from such programmes, but it will continue to look for opportunities to leverage matched funding or co-funding from any new schemes as they emerge.

Summary

- MedCity needs to move to a position where it can raise ~£750k per annum by 2021, assuming that the GLA contributes ~£200k per annum in the long term
- In the first instance, MedCity will look to generate financial support from LEPs and will engage with national Government on possible funding
- MedCity will start to explore the likelihood that HEFCE would support a future bid, beyond 2018/9
- Financial support for projects will be pursued, focusing on events such as London Tech Week and projects such as Angels in MedCity
- In the medium term, a subscription model looks like the best system to ensure support for MedCity's activities, assuming that they should continue to be provided for economic development and as a public good. This will be aimed at publicly funded organisations such as LEPs and HEIs, as the corporate subscription model has been rejected, although MedCity understands that the GLA may still be attracted to this latter option.
- The alignment with GMEC will continue to develop and in the medium term may provide some support to MedCity.

Annex 1

Copy of the MedCity opportunities for industrial partnership paper submitted to the MedCity Management Board – October, 2016

This paper is for INTERNAL circulation only.

Background

MedCity was founded and co-funded with two grants from the Greater London Authority (London Enterprise Panel) and HEFCE. The GLA funding agreement was for a 3 year term due to end in 2017. MedCity is exploring future financing options, including contributions from private sector partners. This work relates to a discussion held with the MedCity Advisory Board in September, 2015, where a number of options were considered as part of a future funding model for MedCity. Specifically, the Advisory Board considered (i) a subscription model, where a defined set of "participants" provide funding as part of a group of stakeholders, an example being the NCUB model where business and universities buy into a group in order to engage with each other on issues of strategic interest; (ii) a sponsorship model.

This paper relates specifically explores two funding models the sponsorship model and an industrial partnership model. While it does not specifically consider a membership model, which was rejected by MedCity's Advisory Board, it does restate the arguments for not considering membership. This paper is based on interviews with a small group of large industry players and posed questions about sponsorship and on how to develop a successful partnership model and the processes to consider. It also draws on document reviews and desktop research.

An appraisal of different models

The **membership model** is the most common one operated by trade associations and similar organisations. There are a number of trade associations and membership bodies representing the sector in London and greater South East, and nationally across England and UK. MedCity has regular engagement with 8 different organisations that follow some form of membership model. There are two main reasons why a membership model is not a suitable option for MedCity. First, membership organisations often spend considerable resources in maintaining and growing the membership and invest membership funds to grow the business. Whatsmore, as industry is seeking value from every budget line, MedCity would have to invest in a programme of activity specifically aimed at representing the needs of its members. This may not fit with the mission of MedCity, and indeed may be slightly at odds with it given its international market facing mandate. Second, it puts MedCity in direct competition with existing trade Associations and would require some form of commercial USP in order to differentiate MedCity's offer from those of other organisations. MedCity has not currently ruled out the **subscription model,** but in considering it, some of the issues associated with the membership model will need to be considered (subscription is a membership with a limited number of larger memberships after all). In addition, in informal discussion with the CEO of the NCUB, the post holder advised MedCity not to pursue this model.

The **sponsorship model** is less likely to require a new direction of representation and member-related provision as the membership model would. However, it will still require deliverables that may not be compatible with MedCity's existing programme. Most corporate sponsorship packages in the sector centre around a single large scale event (OBN, Genesis, BIA dinner). MedCity does not run such events and therefore would have to come up with a unique untested package. Sponsors are usually motivated by exposure; they sponsor in order to have access to an audience, typically as a business development or marketing tool. The interview responses indicated that there is unlikely to be "goodwill" funding from corporate partners, already inundated by requests, including from government (e.g. the dementia discovery fund) on a scale to generate financial security and sustainability for MedCity.

As a consequence, MedCity believes a better strategy is to explore opportunities for industrial partnerships such as seed funding or specific, goal-orientated programmes. These partnerships can bring many benefits beyond the immediate funding, as they have the potential to lead to greater collaboration and knowledge transfer in the eco-system. The development and delivery of such partnerships may also enable MedCity to diversify its funding mix with opportunity to explore further public funding, although it should be noted that some avenues, such as ERDF, are uncertain post-Brexit.

Structuring an attractive industrial partnership model

MedCity has recently launched a seed funding project funded by the ERDF. The funding is specifically for SME and academic collaboration and the fund is designed to cover the cost of the academic institution's participation. MedCity had tentatively sought industrial partners for a broader seed fund around academic innovation spin-outs but it was met with little interest from industry. This experience was used as a means of structure the interviews.

Broadly 4 key themes emerged:

1. Cut through the noise
2. Access is the major driver
3. Partnership structure has resource implications
4. Corporate structures will need to be navigated

1. Cut through the noise

Large and medium corporates in life sciences often receive requests for funds. They are mostly small sums to support reports or events. The advantage for MedCity is that its industry partnership funding requests would not be in this space, however, the sheer volume of requests can make it difficult to manage on the part of industry. There is good will towards MedCity and a desire to collaborate.

The message that came through most consistently was that the most critical element in order to gain cut through is to align with corporate priorities. Respondents were clear that the easiest and most straightforward way to secure funding for partnerships was to be aligned with their priorities. For instance, GE's strategic priorities in cell therapy and molecular diagnostics is where they have invested the most in collaborations and investments (though not seed funds). GSK on the other hand is focused

on its long term pipeline and opportunities in new therapeutic areas; a real long term strategy. AXA PPP, in an existing industrial partnership with MedCity, were clear that the project was aligned with their 3 year corporate priority for a brand repositioning around digital health.

In order to ensure good fit with corporate priorities, all the respondents preferred being involved in the development and design of the partnerships. Projects that were presented as a *fait accompli* were least likely to be funded.

The third element of cut through is RoI. While the expectations on RoI were not the same level as some commercial investments or typical VC seed funds, there was still an expectation to be presented an expected RoI. Interviewees also admitted that RoIs were not always easy to measure. GSK mentioned the Apollo fund and Dementia Discovery Fund as examples of how different investments are measured based on stage of research, size of grant and structure of partnership (e.g.: seed or grant). GE's view on RoI was different as a lot of their industrial partnership investment in innovation involved offering physical incubator or lab space. They also have an IP portfolio too large to commercialise and look for industrial partnerships that will lead to commercial partnerships with a return on their IP. 2 year RoI is expected. Again AXA PPP's priority was around branding and the RoI rather than commercial in this instance was measured on broader metric such as press coverage and adoption of technology in their products.

2. Access is the major driver

The theme that emerged from all respondents is that as large corporates they were blind to the opportunities in early stage innovations. All the partnerships they mentioned as examples were driven by opportunities to access new collaborations.

GSK was clear that while their seed fund does include commercial preferential rights, it does create opportunities for early visibility of new research or technology and "first dibs". Similarly, AXA PPP was motivated to partner with MedCity because it was unsuccessful at accessing the digital health market with its existing partners. From outside the sector they were not able to raise the profile of their own competition enough and therefore attracted poor entrants in terms of quality of the technology or business plan.

GE's motivation is also access, though they have taken a "build it and they will come" approach. By offering incubator and lab space, as well as access to their IP portfolio, they make an attractive offer to innovators. The relationship then gives them an opportunity to have early sight of technologies they may want to integrate or invest in scaling up as a separate entity. Priorities and access go hand in hand. GE said that they are not interested in investing in early stage companies or science as scaling up from small to medium is not their area of strength. They want access to companies with products ready for market or with established technologies, this is the stage at which they feel they can add most value.

An industrial partnership is interesting partly for its members. What the other partners bring in term of access – for instance in access to new geographies or universities or areas of science – will also enhance the offer for investment by some of the corporates.

The type of access to innovation – whether in academia, start ups or even scale ups – offered by industrial partnerships proposed by MedCity is the unique selling point that partners will be looking for.

3. Partnership structure has resource implications

The foundation for an industry partnership are first, matching corporate priorities, second, a unique access point to innovations, and third, the right structure for the management of the partnership and especially the decision making behind the delivery of funds. What emerged from the interviews is that corporates seek a balance between decision-making powers but limiting resource input by the funding partner.

GSK suggested that a VC style fund such as Apollo, which had a well-run, experienced, small, hands on team with strict RoI expectation commanded a large investment. Specialists in the organisation were involved at board level in the funding decision making but otherwise there was no management input from the company. On the other hand, a "direct transaction" such a grant type structure, even if smaller can require a lot more resources from GSK in partnership management. Something that wasn't particularly attractive unless it met a special interest. GE similarly said that the reason they haven't run a seed fund type programme is because no one has been willing to drive through internally resources needed not just for the fund but to manage and run it.

A trusted, credible third party managing the industrial partnership in a way that minimises the "management" resource implication on the corporates is critical to successfully securing funding for partnership. However, this come with stricter RoIs and the challenge of setting RoIs that meet the needs of all partners – pharma is likely to accept longer lags on return compared with diagnostics or devices companies.

The question of co-investment with the public sector was controversial. One interviewee felt that most of these type of funds, such as the dementia platform, were attractive to corporates as a "public relations" tool rather than meeting the standard of scrutiny for other partnerships. The issue was the design of the funds and the control over funding decision making, hence the emphasis on co-developed partnerships being the most attractive.

4. Corporate structures will need to be navigated

All of the interviewees suggested that their companies were siloed, slow and process driven. Once a final project is agreed on, decisions are likely to take 6 months to a year depending on factors such as funding cycles and where the budget is held.

Processes differ and will depend on the sums. GSK for instance has an investment committee. GE seemed more flexible depending on individuals driving it. In different companies, different departments will be motivated by different goals and may take more or less favourable approaches.

The best opportunities came when partnerships fitted with existing programmes (and budgets), such as the MedCity AXAPPP project. Again, fit with corporate priorities or therapy areas are critical to success, though most were also open to new ideas and opportunities too.

Recommendations and next steps

The following recommendations are based on the key findings and suggested as tools to internally define the purpose of the proposition, as well as create a proposition with an increased likelihood of success.

The relationship MedCity should seek to balance is an intersection between funding gaps for innovators with access gaps for corporates. This helps define for industrial partners both the purpose of the fund and the unique access the partnership might offer – generally the main motivator for investment.

Matching along corporate priorities is more complicated as the breadth of the life science sector means that there are different priorities. There are also patterns in priorities and narrowing down perhaps by therapeutic or other areas can make for a more targeted partnership - for instance cell and gene therapy is a long-term corporate priority. Narrowing down a broad priority area will be driven in part by the funding gap, as well as the opportunity in the region, but ultimately further prioritisation should be undertaken in partnership with targeted industrial players, involved in the co-design phase.

Co-designing the industrial partnership is likely to extend the time and resource required to advance it, however it will greatly increase chances of success. Bringing relevant potential partners together in the first instance to discuss the intersection and priority areas to gauge interest can be a useful feedback loop. Then advancing with interested parties a co-designed industrial partnership that is the right fit for the right for the type of project (e.g.: seed fund or grant or other) and the level of investment.

In approaching industry partners for investment in partnerships such as a seed fund, MedCity should present them with 3 things:

- Clarity on purpose and USP of fund (addressing access in particular)
- A case for how it matches their priorities
- An opportunity to co-design

Appendix 1 of Management Board paper

Examples of current Industrial Partnerships Funds:

- **Apollo Fund** – AstraZeneca, GlaxoSmithKline and Johnson & Johnson and the technology transfer offices of Imperial College London, University College London and the University of Cambridge. £40 million for translational funding for biomedical projects developed at these universities
- **Dementia discovery fund** – Alzheimer's Research UK, Biogen, GlaxoSmithKline, J&J, Lilly and Pfizer. $100 million fund (£15 million from the UK government)
- **The One Mind Initiative** – Janssen R&D. Global initiative of $1.1 million to address mental health issues
- **The MRC/AstraZeneca Mechanisms of Disease Initiative** – fund for UK academic researchers to encourage academic and industry collaboration. More than £100 million since 2010
- **Innovative Medicines Initiative** – Europe's largest public-private initiative aimed at speeding up the development of better and safer medicines. European commission and the European pharmaceutical industry. Two different funds: IMI 1 = €2 billion, IMI 2 = €3.276 billion
- **Immuno-Oncology Collaboration** – Regeneron and Sanofi have set up a joint collaboration to discover, develop and commercialize new antibody cancer treatments in immuno-oncology. $1 billion fund
- **Gilead and Yale School of Medicine Collaboration** – Gilead is providing $40 million in research support and basic science infrastructure during the initial 4 year period of the collaboration, with up to $100 million over 10 years. Scientists from both organisations will work together to identify novel cancer therapies
- **Head Health Initiative *** – a partnership between GE and NFL (along with neurosurgeons and top clinicians) to develop better technologies for the diagnosis and treatment of brain injuries. $40 million fund. As well as a separate $20 million fund for two research competitions
- **NBA & GE Orthopaedics and sports medicine collaboration *** - $1.5 million multiple awards to support preclinical and clinical research into sports injuries
- **Discovery Partnerships with Academia (DPAc) Programme –** GSK initiative to stimulate collaboration with academia
- **Action Potential Venture Capital (APVC) -** $150 million fund for therapeutic bioelectric medicines, by Action Potential (strategic venture capital fund of GSK)

Examples of Industrial Partnerships Collaborations:

- **California Institute for Biomedical Research (Calibr)** – Merck has made a $92 million commitment to Calibr over the next 7 years. Calibr is an independent, not-for-profit organisation that will provide academic collaborations a range of industry infrastructure support, such as compound screening and medicinal chemistry

- **Pfizer's Centres for Therapeutic Innovation (CTI)** – CTIs are open to academic scientists to access financial resources, as well as compound libraries and development technologies
- **South West Medicines Safety Partnership Project** – initiative set up between NHS South West and the ABPI to reduce avoidable medicines being mis-prescribed. A steering group has also been set up to increase access of NHS South West trusts to pharmaceutical companies
- **Healthy Communities Initiative** – GE Healthcare and health care providers, plans and employers in Cincinnati joined together to improve the primary health care and population health of the community. 3 year initiative with generally positive results, which is now being introduced in other states
- **MRC Industry Collaboration Agreement (MICA)** – encourages and supports collaborative research projects within the pharmaceutical and health care industry

Action Plan

The following summarises the activities needed in order to decide on which option or combination of options will help us deliver our organisational vision as well as reinforce our values of being objective.

MedCity considers that it will continue to provide public good and in consequence it difficult to sustain a commercial model. This does not mean that MedCity has ruled out consideration of commercial income, but further work is required to determine what areas may be suitable, what levels may be expected and how options on commercial activity fit, or conflict, with MedCity's mission and values. In consequence, MedCity believes that sustained funding from public organisations, including universities, GLA, LEPs, DIT, Hefce, BEIS etc is likely to be the most appropriate and sustainable route.

Strategy	Key Activities	Owner	Timeframe & status
Decision on funding options/model	Stakeholder analysis and strategic review	SH & NP	Dec 2016 ongoing
	Early discussion with key potential funders (as outlined in paper), specifically Oxfordshire LEP, GCGP LEP, BEIS and DIT	SH & Management Board	Commence in January, 2017
	Engage London LEP to garner support for engagement with bodies listed above, particularly other LEPs	MedCity and GLA	To be determined but in line with establishment of the new LEP – February, 2017 onwards
	Discussion at MedCity/GMEC management board on plans and identification of champions to work with MedCity staff on engagement with specific bodies. Consideration of the need to identify further expertise	Management Board	February, 2017
	Engage with HEFCE to gauge future direction of funding within the Catalyst scheme and start to scope options on funding from 2018/19 onwards	SH, EF, SHo	
	Build community of financial supporters for Angels in MedCity programme in order to reduce reliance on MedCity programme budget from 2018 onwards.	PO'B/SH/AiMC Steering Group	Commence in Q1 2017
Commercial income	Gain expert advice on legal and financial considerations		Q1 2017
	Confirm customer demand for services		Q1 2017

	Evaluate cost model for existing services		Q2 2017
	Develop a commercial model for new services as appropriate		Q3 2017
	Operations to support commercial model established		Q4 2017
	Market and launch commercial model		Q4 2017