

# The Impact of the 2015 Comprehensive Spending Review on Higher Education Fees and Funding Arrangements in Subjects Allied to Medicine



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London  
Economics

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**UNISON**  
*the public service union*

**nus**  
national union of students

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## Foreword

Whenever a government seeks to reform the NHS in pursuit of cost savings, their proposals must be subject to the closest scrutiny. Following the Chancellor of the Exchequer's announcement in the spending review statement in November of last year that the Government intended to scrap NHS bursaries in 2017, UNISON and the National Union of Students (NUS) expressed grave concerns about the devastating impact the changes would have on graduate numbers, widening participation and patient safety.

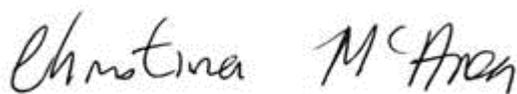
We were still more concerned by the absence of any rigorous analysis of the proposals, either at the time they were announced or even when the subsequent consultation on implementation was published in April. For that reason, UNISON and NUS jointly commissioned London Economics to undertake an independent economic analysis of the Government's proposed changes. The analysis aims to determine whether replacing bursaries with income contingent loans would do what the Government claimed: create additional training places, save the Government money, and increase funding for universities. Worryingly, the analysis confirmed our worst fears.

Firstly, the increased cost to students will deter people from becoming a nurse, midwife or allied health professional. Far from creating 10,000 additional training places as claimed by the Government, the changes will reduce current participation levels by 6-7% (or almost 2,000 students). Fewer nurses qualifying in 2020 will have disastrous consequences for patient safety and exacerbate the current recruitment crisis in the health and social care sector.

Secondly, because of the reduction in student numbers and the need to finance access bursaries under the Office for Fair Access guidance, universities will be worse off by approximately £57-£77 million per cohort. Instead of creating a sustainable funding system for universities as promised by the Government, the changes will mean greater volatility and uncertainty for universities' future funding. Some universities may decide to stop running some health related courses altogether if they are unsustainable.

Finally, because most loans will never be repaid in full, the cost savings to the Treasury may be just £88 million per cohort (85% lower than the Government estimates). With the decline in the number of students, dependency on Agency and overseas staff will increase. This increased Agency cost to cover staffing shortfalls may cost Trusts at least £100 million per cohort, wiping out any potential cost savings.

In light of the report's findings, it's clear that scrapping NHS bursaries is bad for students, bad for universities and bad for patients. UNISON and NUS urge the Government to drop its plans to remove NHS bursaries immediately and instead consult from first principles with students, patients, and the health and higher education sectors on how it can best fund and support the future healthcare workforce



**Christina McAnea**  
**UNISON Head of Health**



**Megan Dunn**  
**National President, NUS**



## Executive Summary

### What were the changes proposed by the government in the 2015 CSR?

The 2015 Comprehensive Spending Review (CSR) (HM Treasury (2015)<sup>1</sup>) contained a number of significant policy proposals in the education and skills arena, although potentially none as important as those relating to the higher education fees and funding arrangements for nursing, midwifery, and allied health subjects. Our understanding of these fundamental changes are as follows:

- Students undertaking nursing, midwifery and allied health degrees from September 2017 will be moved on to the standard student support system. Essentially, all non-repayable mainstream NHS Bursaries and additional allowances will be replaced with income-contingent loans<sup>2</sup>.
- Furthermore, higher education places will no longer be funded via the Health Education England commissioning process and will move to a **variable fee-based tuition fee system backed by income-contingent loans**.

### What will be the impact of the proposed changes in the 2015 CSR<sup>3</sup>?

As a result of these policy changes,

- **Healthcare students/graduates will be substantially worse off.** The **71%** increased cost that students and graduates will bear will result in the Allied Health Professions being less attractive, and will in all likelihood reduce higher education participation by **6-7%** - equivalent to almost 2,000 students in the first year.
- **Higher Education Institutions will also be worse off** by approximately **£57-£77 million** per student intake. Higher Education Institutions will be hit by the reduction in student numbers, but also by the reduction in the unit of resource associated with these students as a result of bursaries and other access measures that will need to be financed. Furthermore, if fees and funding support is entirely portable, Higher Education Institutions' income streams are likely to be more volatile in future.
- **At first glance**, following the removal of grants and allowances, as well as making students/graduates bear a significant proportion of the tuition fee cost, **the Exchequer will be approximately £534 million per cohort better off**. However, this is based on the assumption that students in Allied Health Professions will earn comparable post-graduation earnings as other graduates.
- If the analysis is replicated – and we assume that the earnings of graduates in Allied Health Professions are comparable to fully qualified nurses, midwives and health professionals, then **the cost savings achieved by the Exchequer declines by anywhere between 50% and 85%** (to approximately **£88 million**).
- Given the acute shortages across the NHS workforce, any decline in the level of education commissioning and student numbers is likely to lead to a significant increase in staff shortages in the medium term – with a potential impact on both patient safety, as well as a greater dependency on Agency and overseas staff. The increased cost associated with this could wipe out almost entirely any potential savings.

<sup>1</sup> HM Treasury (2015), *Spending Review and Autumn Statement*, 27 November 2015, Available [here](#) [Accessed 29-02-2016]

<sup>2</sup> Note that the move to loans will mean access to additional financial support for health students during their studies in absolute terms [2015 CSR {Paragraphs 1.100, 2.46 and 3.122}]

<sup>3</sup> Note that the analysis presented here only considers students studying Allied Health professions domiciled in England. There may be additional consequences for Devolved Administrations or for students resident in other Home Nations studying in England that are not considered here.

## How specifically will students be affected?

In relation to students, the modelling suggests that:

- Over a three year full-time undergraduate degree, the **average non-repayable maintenance grant** and allowances received by students as part of the NHS Bursary in Allied Health Professions will decline from **£7,857** to **zero**.
- Following the removal of the NHS bursary and its replacement with repayable loans, a student undertaking a full-time degree in nursing professions will see their total debt (comprising maintenance and tuition fee loans) increase from approximately **£6,930** to approximately **£48,788** on graduation.
- Compared to being net recipients of funding equivalent to **£11,568** per student/graduate under the current (pre-2015 CSR) funding arrangements, students/graduates in nursing professions will now be net contributors under the proposed arrangements (by **£3,626**). **This means that under the proposals set out in the 2015 CSR, students/graduates undertaking three year undergraduate degree courses in nursing professions will contribute approximately £15,193 more in today's money terms than was previously the case.**
- Taking into account the total direct and indirect costs associated with undertaking a three year full-time degree, **the percentage increase in the total cost of undertaking a degree in the nursing professions is estimated to be 71%**. Using external evidence on the relationship between the demand for higher education and price suggests that there will be a **6.2%** decline in demand. This corresponds to a decline of approximately **1,946** students out of a baseline total of **31,325**.

## How will Higher Education Institutions be affected?

In relation to Higher Education Institutions:

- The total resources that will be received by Higher Education Institutions will decline by approximately **£57 - £77 million** per student intake<sup>4</sup>.
- Approximately half this decline will be as a result of the fall in student numbers (following the **71%** increase in effective costs passed onto students). However, there will also be a reduction in Higher Education Institutions' revenues as a result of the fact that a proportion of any tuition fee received by Higher Education Institutions (approximately 15% above £6,000) will now be 'handed back' to students via the access agreements that Higher Education Institutions sign with the Office for Fair Access<sup>5</sup>.
- In addition to the decline in funding, there may be additional consequences for Higher Education Institutions. In particular, Health Education England (HEE) currently plays an important role in *balancing* the demand for higher education in Allied Health Professions with the current supply of Higher Education Institution places (both by institution and by subject discipline). With the removal of this balancing-role from HEE, and the fact that the entire resources of the fees and funding system will be fully portable by the student body, means that there could be significantly greater volatility and uncertainty associated with Higher Education Institution future funding flows.

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<sup>4</sup> The analysis takes **no account** of the potential additional costs that might be incurred by HEIs or Trusts in relation to recruitment or retention (i.e. "golden hellos" or possible loan forgiveness during employment)

<sup>5</sup> Note that we have assumed that Higher Education Institutions will contribute approximately 15% of the fee income in excess of £6,000 to student bursaries and various other forms of support. In reality, HEIs also contribute a further 10% of tuition fee income in excess of £6,000 to fund widening participation and retention activities (Office for Fair Access ([here](#)) [Accessed 23-03-2016]). This corresponds to £300 per student per annum, and totals £20 million in aggregate for a cohort of students

## How will the Exchequer be affected?

From the Exchequer's perspective:

- Following the 2015 CSR proposals, and the huge shift in funding from NHS bursaries to loans, the **reduction** in total Exchequer contribution per student/graduate was estimated to be **£14,226** per student/graduate (a **35%** decline from **£40,272** to **£26,046**). The Exchequer will now contribute approximately **£18,648** to students/graduates in the form of interest rate subsidies and expected write offs and **£7,398** (assuming that there is no change) in relation to salary support or the Clinical Placement Tariff.
- Looking in greater detail at Exchequer resource flows, the **headline analysis** suggest that, overall, the Exchequer saves approximately **£534 million** per cohort for the proposed changes contained in the 2015 CSR.
- Specifically, the Exchequer will save approximately **£234 million** as a result of no longer funding non-repayable NHS bursaries, and a further **£687 million** in funding allocated through Health Education England. However, against this, the cost of the interest rate subsidy and loan write-off associated with full-time student tuition fees stands at **£227 million**, while the costs associated with means tested maintenance loans is estimated to be **£210 million**.
- In aggregate, the analysis suggests that the Exchequer 'saves' approximately **£415 million** per cohort in relation to full-time students and **£119 million** in relation to part-time students.

## Over-estimating the cost savings to the Exchequer?

- The RAB charge, which represents the proportion of the tuition fee and maintenance loan never expected to be repaid, is currently estimated by the Department for Business, Innovation and Skills to be **25%** across **all** full-time undergraduates. In our headline analysis, we have assumed that the earnings achieved by students in the Allied Health Professions are representative of the graduate cohort as a whole. **However, given the gender and age profile of students in the Allied Health Professions, the estimate of the RAB charge specific to the Allied Health Profession student stands at 43.5%.**
- Furthermore, given the **actual earnings profiles** of graduates undertaking degrees in the Allied Health Professions, rather than being 'average' earners, these newly qualified graduates are more likely to be situated on the 3<sup>rd</sup> decile or 4<sup>th</sup> decile of earnings (with an associated RAB charge of **85.9%** or **68.0%**, respectively)<sup>6</sup>.
- In other words, given the fundamentally different characteristics of both students and graduate earnings in the Allied Health Professions, the potential 'savings' accrued by the Exchequer under these proposals might be significantly lower than the headline estimates. Before considering the potential increased service delivery costs, if we assume that graduate earnings are on the 3<sup>rd</sup> earnings decile, the actual headline cost savings are 85% lower than the headline estimates, standing at just **£88 million** per cohort.

## Wider consequences

- In addition to achieving relatively limited direct savings, if there is a decline in the number of students in Allied Health Professions participating in higher education, this means that in the medium term, there will be insufficient entrants to the NHS (and independent, private and social care sectors) to compensate for those members of the workforce that leave the

<sup>6</sup> The Migration Advisory Committee (MAC) report ([here](#)) suggests that the median pay for nurses is £31,500 (£7,500 below the median pay in other graduate occupations). This is comparable to the figures presented in this report. Specifically, we estimate the median real earnings for individuals aged 30-59 to be £37,000 using data from the Labour Force Survey (weighted by gender composition). Average real earnings at the 3<sup>rd</sup> and 4<sup>th</sup> decile were estimated to be £26,500 and £31,700, respectively.

profession every year. This will exacerbate the already acute staff shortages that currently exist<sup>7</sup>.

- Combining the expected decline in numbers entering Allied Health Professions in Higher Education with increased Agency staffing costs to cover staffing shortfalls, we estimate that there will be an additional **£100.3 million** cost incurred by Trusts per cohort. This implies that depending on the assumptions made in relation to post graduation earnings in Allied Health Professions (and the estimate of the RAB charge), the entire 'savings' that might be achieved through reduced commissioning costs might be eliminated almost completely.

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<sup>7</sup> The proportion of nurses leaving the profession increased from **6.8%** in 2009-10 to **9.2%** in 2014-15 (compared to **7.9%** and **9.0%** across all staff (including clinical staff) [NAO (2016) *Managing the Supply of NHS Clinical Staff*], while the same report suggests that in 2014, there was a **7.2%** shortfall in the nursing workforce (equating to almost **28,000** individuals). Moreover, nursing has been placed on the Shortage Occupation List (SOL) by the Migration Advisory Committee [MAC (2016), *Partial review of the Shortage Occupation List: Review of nursing*]

# 1 What changes is the government making to healthcare student bursaries?

The 2015 Comprehensive Spending Review (HM Treasury (2015)<sup>8</sup>) contained a number of significant policy proposals in the education and skills arena, although potentially none as important as the proposals relating to the higher education fees and funding arrangements for nursing, midwifery, and allied health subjects. Although there were relatively limited details of the proposed changes to the future arrangements relating to the funding of nursing, midwifery and allied health subjects, our understanding of the changes – which were broadly confirmed on publication of the consultation documents in April 2016<sup>9</sup> - are as follows:

- **Students undertaking nursing, midwifery and allied health degrees from September 2017 will be moved on to the standard student support system.** Essentially, all non-repayable mainstream NHS bursaries and additional allowances will be replaced with income-contingent loans<sup>10 11</sup>;
- **Students undertaking nursing, midwifery and allied health subjects from September 2017 will also be subject to the full tuition fee.** As with the wider population of undergraduate students, those studying health-related degrees will have access to income-contingent loans to cover the full tuition fee; and
- The cap on the number of student places for nursing, midwifery and allied health subjects will be relaxed<sup>12</sup>.

## 1.1 What exactly does this mean in practice?

There are several changes to higher education fees and funding arrangements that need to be split to allow for further analysis. In summary, these are as follows:

- **The first relates to the fact that students undertaking nursing, midwifery and allied health degrees from September 2017 will be moved on to the standard student support system.** Essentially, all non-repayable mainstream NHS bursaries and additional allowances (i.e. *Extra Weeks Allowances*) will be replaced with income-contingent loans<sup>13 14</sup>.
- **Secondly**, students undertaking training in Allied Health Professions commissioned through Health Education England currently pay no tuition fees. From 2017-18, these students of nursing, midwifery and Allied Health Professions will be required to pay a non-means tested tuition fee – of up to £9,000 per annum (and potentially more with the introduction of the Teaching Excellence Framework<sup>15</sup>) – backed by income contingent tuition fee loans administered through the Student Loans Company.

<sup>8</sup> HM Treasury (2015), *Spending Review and Autumn Statement*, 27 November 2015, Available [here](#) [Accessed 29-02-2016]

<sup>9</sup> Department for Health (2016), “Reforming Healthcare education funding: creating a sustainable future workforce”, London, 2016

<sup>10</sup> Note that the move to loans will mean access to additional financial support for health students during their studies in absolute terms [2015 CSR {Paragraphs 1.100, 2.46 and 3.122}]

<sup>11</sup> Income contingent loans (ICR) are repayable at 9% of income in excess of £21,000 and are subject to a variable real interest rate depending on earnings (between 0% and 3%) Loans are written off after 30 years following the Statutory Repayment Due Date (SRDD).

<sup>12</sup> In relation to the removal of the cap on student numbers, the Comprehensive Spending Review states that “*the current grant system means that there is a cap on student nurses and over half of all applicants to nursing courses are turned away. This reform will enable universities to provide up to 10,000 additional nursing and other health professional training places this Parliament. This will ensure that there are enough nurses for the NHS while cutting the current reliance on expensive agency staff*”

<sup>13</sup> As part of the 2015 Comprehensive Spending Review, a comparable policy was announced for *all* students irrespective of the subject of study, from 2016-17.

<sup>14</sup> More specifically, as part of the NHS bursary, students in nursing, midwifery and other subjects allied to medicine were historically awarded both non-means tested and means-tested maintenance grants, reduced rate means-tested maintenance loans, as well as means-tested allowances associated with long course participation (*‘Extra Weeks Allowance’*). If students in Allied Health Professions are moved onto ‘standard’ student support arrangements, this suggests that these *non-means and means-tested maintenance grants* will also be removed and replaced with income contingent loans. Furthermore, the additional non-repayable grant that was available as part of the *Extra Weeks Allowance* will also be converted to a non-means tested loan.

<sup>15</sup> Department for Business, Innovation and Skills (2015), “*Fulfilling our potential: Teaching Excellence, Social Mobility and Student Choice*”, November 2015 ([here](#)) [Accessed 23-03-2016]

## 2 Who will be the biggest losers?

Demonstrating the impact of the 2015 CSR in relation to a representative full-time undergraduate student undertaking a three-year degree in nursing, the information in Table 1 illustrates the average level student support that might be currently available and following the 2015 Comprehensive Spending Review.

**Table 1 Comparison of student finance arrangements in a nursing degree following 2015 CSR**

	Three year nursing and midwifery degree		
	2015-16	2017-18	Change
<b>Full time students</b>			
Number of students	26,180	24,554	(1,626)
Average non-means tested maintenance Grant	£1,000	£0	(£1,000)
Average Means-tested maintenance Grant LAH	£1,446*	£0	(£1,446)
Average Means-tested maintenance Grant LAFHOL	£1,940*	£0	(£1,940)
Average Means-tested maintenance Grant LAFHIL	£2,525*	£0	(£2,525)
<b>Average Means-tested maintenance Grant</b>	<b>£1,899*</b>	<b>£0</b>	<b>(£1,899)</b>
Average Access Bursary	£0	£450	£450
<b>Part time students</b>			
Number of students	5,145	4,825	(320)
Average Non-Means Tested Maintenance Grant	£500	£0	(£500)
Average Means-tested Maintenance Grant	£1,197	£0	(£1,197)
Average Benchmark Price	£4,314	£0	(£4,314)
Average Tuition Fee	£0	£4,500	£4,500
Average means-tested Maintenance Loan	£1,455	£0	(£1,455)

Note: MT – Means-tested; NMT – Non-means tested; LAH - Living at Home; LAFHOL - Living away from home outside of London; LAFHIL - Living away from home inside London. \* Including Extra Weeks Allowance where academic year is assumed to be 42 weeks in length. Note that all estimates incorporate expected non-completion. *Source: London Economics' analysis*

### Non-repayable Grants

Using information on the distribution of students by region of study, whether living at home and eligibility criteria (and assuming a 42 week average course length), the analysis suggests that over a three-year degree, the **average maintenance grant** received as part of the NHS bursary will decline from **£8,697** (made up of **£1,000** annual non-means tested maintenance grant and **£1,899** average annual means-tested maintenance grant and Additional Weeks' Allowance) to **zero**.

### Repayable Loans

In relation to maintenance loans, again using the current distribution of undergraduates living at home, away from home inside and outside of London, the average maintenance loan currently stands at **£6,930** over the course of a three year nursing degree. Following the 2015 CSR, this is expected to increase to **£21,789** (**£7,263** per annum). Included within this new maintenance loan

estimate are the additional *Long Course Loans* that are now payable as loans instead of the current system where the *Extra Weeks Allowance* was paid in the form of a means-tested grant<sup>16</sup>.

### Tuition fee loans

In relation to tuition fees and tuition fee loans, we have assumed that all Higher Education Institutions may charge the full **£9,000** currently possible (although the cap may rise by inflation for some institutions following the introduction of the Teaching Excellence Framework). However, Higher Education Institutions will have to contribute a given proportion of the tuition fee in excess of **£6,000** to adhere to any access agreement that is in place with the Office for Fair Access. Currently, this stands at approximately **15%**, which implies that Higher Education Institutions will receive a net tuition fee of **£8,550** per annum<sup>17</sup>, while the government will provide comparable tuition fee loans to the value of **£8,550** per annum in total<sup>18</sup>.

Finally, there are further costs incurred by Health Education England relating to the commissioning of training places. Although we have assumed that HEE will continue to incur these costs going forward (i.e. no change over time), it is important to include them given the monetary significance. However, for some of these costs, there is significant variation depending on the specific profession under consideration. As such, we have presented the example of **Adult Nursing**. Presented again in Table 1, the analysis indicates that the costs associated with the **Clinical Placement Tariff** over the three years stand at approximately **£5,848** (estimated to be between approximately **£1,750** and **£2,150** on average per annum<sup>19</sup>), while the average cost associated with **Salary Support** stands at **£781** per annum (**£2,343** in total over the three years<sup>20</sup>). In total, the representative student undertaking a three year full-time degree in nursing or midwifery will see their maintenance and fee loans increase from **£6,930** to approximately **£48,788**<sup>21</sup>.

### The RAB Charge – who pays for maintenance and tuition fee loans?

To understand the balance of contributions between the individual and the Exchequer, it is necessary to estimate the **Resource Accounting and Budgeting (RAB) charge**. Specifically, the size of the public purse maintenance and fee loan subsidy is measured by the RAB charge, which calculates the proportion of the nominal loan value that would not be expected to be repaid (in present value terms). Under the current student support regime, non-repayment occurs as a result of debt forgiveness after 30 years, or in the case of permanent disability or death. Based on graduate earnings profiles (from the Labour Force Surveys) and the administrative information relating to the criteria for repayment of loans, estimates of the RAB charge *prior to the 2015 CSR* stood at approximately **45%** for full-time undergraduate students<sup>22</sup>. This implies that for every £1,000 in loans that are provided by the government, approximately £550 would be expected to be repaid (in present value terms) with the remaining £450 being ‘lost’ to the public purse as a result of write-offs.

The RAB charge is influenced by a number of factors. For instance, increasing the volume of loans made available *increases* the RAB charge simply because it is less likely that an individual will achieve the necessary earnings to make the repayments associated with the increased loan value. Other

<sup>16</sup> We have assumed that there is **no change** to the range of other allowances that are currently available to students in the Allied Health Professions. This is not strictly correct in the sense that some grants for particular students will either be reduced or removed entirely (for instance the Dependents Allowance for children) [See Table 6 of Department for Health Impact Assessment “*Reforms to funding and financial support for nursing, midwifery and AHP Bursary students*”].

<sup>17</sup> Note as per footnote 5 the impact of access agreements with the Office for Fair Access is likely to have a greater reduction on the available unit of resource retained by Higher Education Institutions (by approximately **£300** per student per annum of **£20 million** in total)

<sup>18</sup> Note that on average, although the tuition fee loan available to students is modelled to be **£8,550** per annum, in reality, once in course attrition is taken into account, the average tuition fee loan per successful full-time completer is closer to **£23,171**.

<sup>19</sup> See a discussion of Clinical Placement Tariffs [here](#) [Accessed 23-03-2016]

<sup>20</sup> Based on the analysis of data from the Health Education England Salary Support Portal for Adult Nursing.

<sup>21</sup> Excluding interest charged during qualification attainment

<sup>22</sup> Hansard (2014), Daily Written Answers, 20<sup>th</sup> March 2014 ([here](#))

factors that affect the RAB charge include expected wider economic factors affecting **graduate earnings** (and the **composition of the graduate population**), or the characteristics of the loan system (for instance, the **interest rates** charged (0%-3% depending on earnings); the **repayment period** (30 years); the **threshold for repayment** (£21,000); or the **repayment rate** (9%).

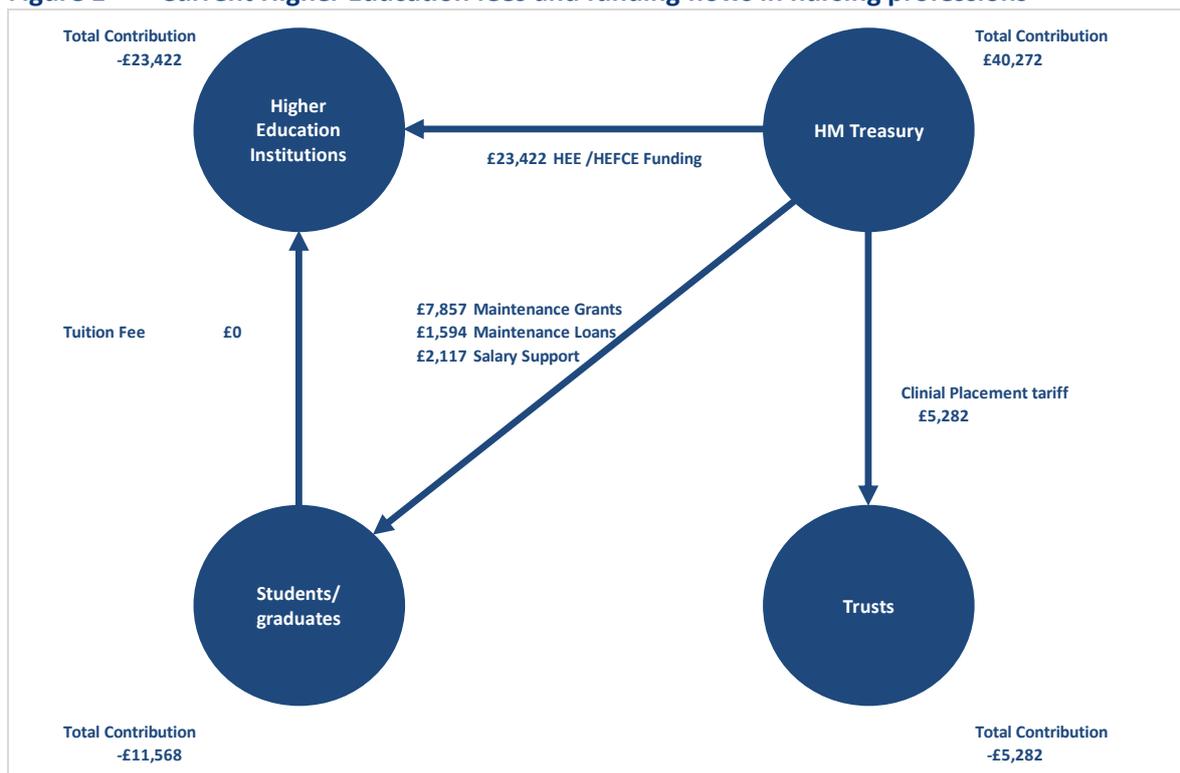
Furthermore, the **discount rate**, by which we value future streams of graduate repayments in today's money terms, is of crucial importance. Specifically, the announcement alongside the 2015 CSR to freeze the repayment threshold for 5 years<sup>23</sup>, as well as reduce the discount rate from 2.2% to RPI +0.7% had the effect of reducing the estimated RAB charge from **45%** to **25%**<sup>24 25</sup>.

The key point in relation to the RAB charge is that this measure allows for the assessment of the relative proportion of any loans actually paid for by HM Treasury compared to graduates. The higher the RAB charge, the higher the proportion of the loans that will never be repaid – and essentially paid for by the Exchequer. This means that although grants might be replaced by loans, the proportion that is ultimately paid for by the graduate in receipt of the loan whilst a student might be relatively small, which in turn means that there may be relatively limited savings associated with the policy change.

### Current resource flows at the individual level

In Figure 1, we illustrate the contributions of different key stakeholders: HM Treasury; Students/graduates; Higher Education Institutions; and Trusts.

**Figure 1** Current Higher Education fees and funding flows in nursing professions



**London Economics' analysis**

Although there will clearly be some degree of simplification; under the **current fees and funding regime** (i.e. pre 2015 CSR proposals), the analysis indicates that for the representative student

<sup>23</sup> Department for Business, Innovation and Skills (2015), "Freezing the student loan repayment threshold – summary of responses and Government response", 25<sup>th</sup> February 2016 ([here](#))

<sup>24</sup> The impact of the change in the discount rate and freeze in the repayment threshold was provided by the Minister of State (Universities and Skills) on 1<sup>st</sup> February 2016 ([here](#))

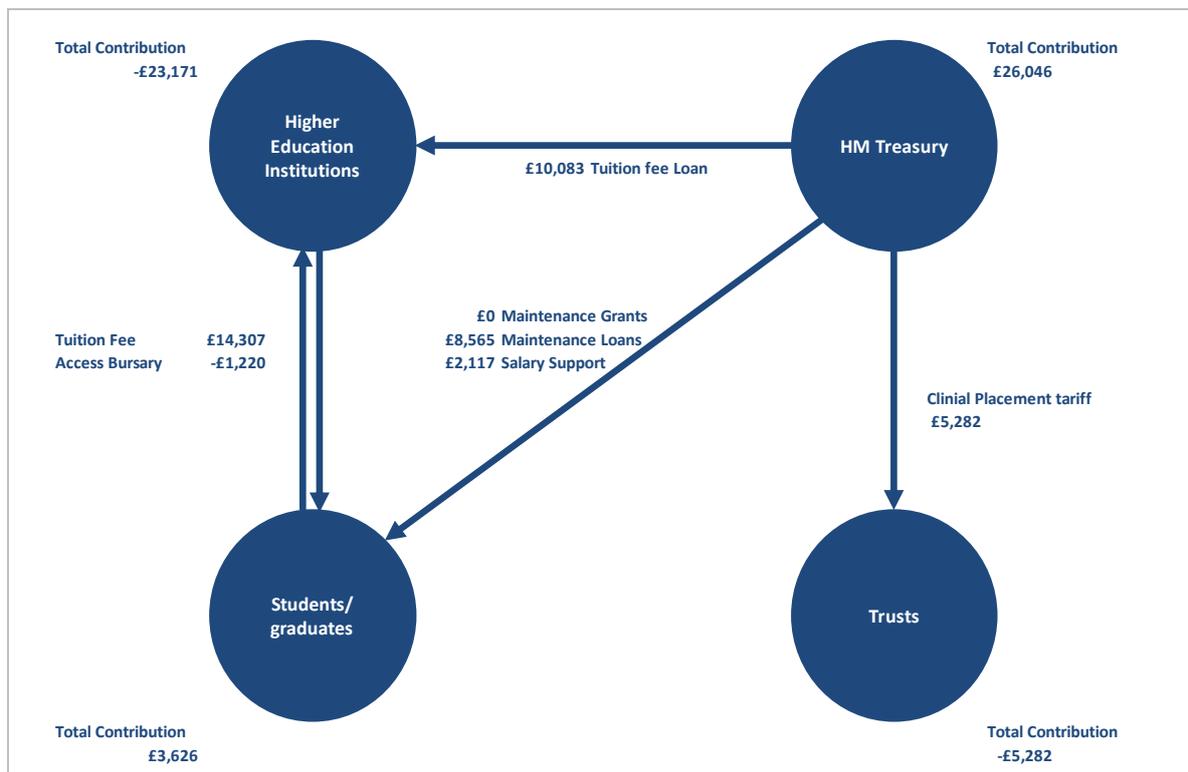
<sup>25</sup> Note that the analysis has been undertaken using the 0.7% discount rates on resource flows.

nurse<sup>26</sup>, HM Treasury's total contribution stands at approximately **£40,272** per student/graduate. This aggregate estimate consists of **£23,422** received by HEIs, but also **£5,282** received by Trusts in the form of Clinical Placement Tariffs, as well as **£11,568** provided to students/graduates in student support. Of this **£11,568**, approximately **£7,857** is provided to students in the form of non-means-tested maintenance grants; means-tested maintenance grants; and means-tested *Extra Weeks Allowance*. In addition, **£1,594** represents the interest rate subsidy and write-off associated with non-means tested maintenance loans; and **£2,117** relates to salary support.

### Resource flows at the individual level under the proposed amendments

In Figure 2, we provide the resource flows between the key stakeholders under the fees and funding arrangements proposed in the 2015 CSR. We have also modelled the entire flow of resources between the key stakeholders and made our own estimate of the RAB charge (**43.5%**).

**Figure 2 Proposed Higher Education fees and funding flows in nursing professions**



London Economics' analysis

### Exchequer

On the Exchequer side, following the huge shift from grants to loans, the **reduction** in total Exchequer contribution stands at **£14,226** per student/graduate (i.e. a **35.3%** decline from **£40,272** to **£26,046**). Specifically, using information from the Labour Force Survey, following these proposed changes, the estimate of the RAB charge is expected to increase from **25.5%** to approximately **43.5%**<sup>27</sup> (meaning that for every £1,000 in loans issued by the Student Loans Company, an **additional** £200 will be written off). In more detail, rather than applying to a loan balance of approximately

<sup>26</sup> This estimate incorporates an expected rate of non-completion. As such, although we assume that the maximum fee charged by Higher Education Institutions stands at £9000 per annum, as a result of the incidence of in course attrition, the average funding allocated by Health Education England approximately £24,432 over the three year full-time undergraduate degree (i.e. £613 million on total cost divided by 26,180 FT starters).

<sup>27</sup> Note that this estimate of the RAB charge is based on the average earnings of the **entire cohort of graduates** (i.e. all graduates irrespective of the degree level qualification undertaken) – and would therefore underestimate the expected RAB charge that might be associated with the nursing, midwifery and other Allied Health Professions

**£6,930**, the higher RAB charge will apply to loans approaching **£47,500** on average. In relation to tuition fee costs, the Exchequer will contribute approximately **£10,083** in the form of interest rate subsidies and expected loan write-offs (with student/graduates contributing the remaining **£14,307** of the tuition fee). Furthermore, the Exchequer will contribute approximately **£8,565** in maintenance loan write-offs to student/graduates. We have assumed that there is no change in relation to salary support or the Clinical Placement Tariff (**£2,117** and **£5,282** respectively)<sup>28</sup>.

### Higher Education Institutions

Following the proposed amendments to fees and funding, the analysis suggests that there will be a reduction in the total Exchequer contribution to **£23,171** per student (see Figure 2)<sup>29</sup>. Unless there are significant levels of compensating income from other sources (such as enhanced funding through Higher Education Funding Council of England (HEFCE)), Higher Education Institutions will be immediately **worse off** than under the current funding system. Specifically, as a result of the need to charge **£9,000** per annum in fees, HEIs will be subject to access agreements through the Office for Fair Access, and will therefore be required to contribute a proportion of any fee in excess of the 'basic fee' (currently standing at approximately **15%** in excess of **£6,000**). This means that HEIs will receive approximately **£23,171** in fee income – corresponding to a **1%** decline per student<sup>30 31</sup>. However, depending on the level of widening participation activities undertaken, this reduction in income might be significantly greater.

**This fundamental shift in the approach to allocating resources will make the future supply of higher education training fundamentally more volatile as HEIs are exposed to greater competitive pressures.** As detailed in the following section, the huge increase in the cost of higher education will result in a reduction in the demand for higher education in Allied Health Professions – thereby also reducing the volume, as well as the unit of resource, achieved by Higher Education Institutions.

### Students

Although Higher Education Institutions are worse off – both as result of the reduction in the number of students expected to participate in higher education, but also because of the loss in unit funding (as a result of bursaries and other access measures), the group most adversely affected are those students/graduates that have not been deterred from entering higher education.

As previously indicated, compared to being net recipients of funding equivalent to **£11,568** per student/graduate under the current (pre-2015 CSR) funding arrangements, students/graduates are now net contributors under the proposed arrangements (by **£3,626**). This means that under the proposals set out in the 2015 CSR, students/graduates undertaking three-year undergraduate degree course in nursing professions will contribute approximately **£15,193 more** in today's money terms than was previously the case.

In more detail, students/graduates now contribute **£14,307** in tuition fees (minus approximately **£1,220** in access bursaries) compared to **zero** currently. Furthermore, students will no longer receive maintenance grants (instead of **£7,857** under current fees and funding arrangements). However, students will receive loan interest rate and write off subsidies of **£8,565** on average compared to

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<sup>28</sup> Note that in the Department for Health "Reforms to funding and financial support for nursing, midwifery and AHP Bursary students" Impact Assessment, there is an additional £80 million per annum HEFCE Teaching grant incurred by the Exchequer, however, there is no information on how this might be allocated going forward. This item has not been included in this analysis but would increase the estimated costs incurred by the Exchequer presented in later sections.

<sup>29</sup> Note that as a result of the increase in the 'price' of higher education, the modelling approach incorporates a reduction in the demand for higher education. In particular, from wider academic research we have estimated the elasticity of demand to equal -0.087 suggesting that following a 100% increase in the price of higher education, the quantity demanded will decline by 8.7%.

<sup>30</sup> Note again that this estimate assumes that there is some degree of non-completion (which is the same as under the baseline scenario)

<sup>31</sup> Note as per footnote 5 the impact of access agreements with the office for Fair Access is likely to have a greater reduction on the available unit of resource retained by Higher Education Institutions (by approximately **£300** per student per annum of **£20 million** in total)

**£1,594** previously. All this implies students/graduates are approximately **£15,193** worse off under the proposed changes.

### How does this translate into a percentage change in price?

To understand what this change in contribution means in percentage terms, it is necessary to understand the **total costs** associated with higher education participation, in particular, the *opportunity costs* associated with foregoing three years in the labour market to undertake full-time study. Information from Higher Education Statistics Agency (HESA) suggests that the average age of a full-time undergraduate student in Allied Health Professions stands at approximately 27<sup>32</sup>. Using information from the Labour Force Survey between 2014(Q1) and 2015(Q3) suggests that the total income forgone by a representative *female* undertaking a three year full-time undergraduate degree stands at **£32,840**<sup>33</sup>. This implies that the total direct and indirect costs associated with undertaking the three year full time degree increased from **£21,272 - (i.e. £32,840 - £11,568)** to **£36,466 – (i.e. £32,840 + £3,626)**, equivalent to an increase of **71%**.

### Price elasticity of demand

Despite the fact that the 2015 CSR announced an additional **10,000** higher education places in Allied Health Professions, this ‘supply side’ policy is essentially of limited practical importance if there is insufficient demand to meet the increased number of places. This is particularly important given the fact that there is some evidence suggesting that Local Education and Training Boards (LETBs) are having significant difficulties in recruiting enough students to fill the current number of training places (National Audit Office (2016)<sup>34</sup>), as well as the fact that a significant proportion of starters either suffer from in-course attrition and drop-out, or don’t go into the profession upon completion<sup>35</sup>.

The price elasticity of demand is the percentage change in quantity demanded following a given percentage change in demand. Although it is fundamentally difficult to assess the elasticity of demand, the various changes in higher education fees, grants and loans since 1996 have allowed the assessment of the different effects associated with the alternative options. In particular, the Institute for Fiscal Studies (2010)<sup>36</sup> estimated that a **£1,000** increase in fees has a negative impact on participation of around **4.4 percentage points**, while a comparable increase in loans would partially negate this effect (**3.2 percentage points**), thus, “increasing fees without increasing loans and/or grants by the same value or more, will result in a negative impact on participation”.

<sup>32</sup> In 2013/14, approximately 41% of full-time undergraduate students in subjects allied to medicine were 20 or below; 26% were aged between 21 and 24; 13% were aged between 25 and 29; while the remaining 20% were aged in excess of 30. Assuming that those in excess of 30 were actually aged 40, implies that the average age of full-time undergraduates is approximately 27.

<sup>33</sup> To estimate the opportunity cost associated with undertaking a three year qualification in nursing, we have identified the median earnings achieved by women in possession of a Level 3 academic or vocational qualification as their highest qualification. This stands at **£14,615** (where annual earnings on the 25<sup>th</sup> percentile was estimated to be **£9,034** per annum and earnings on the 75<sup>th</sup> percentile stand at **£19,165** per annum). The employment rate stands at **0.749**. Therefore adjusting annual earnings by the probability of being employed results in an annual opportunity cost of approximately **£10,946** or **£32,840** over the course of a three year programme.

<sup>34</sup> National Audit Office (2016), *Managing the supply of NHS Clinical Staff in England*, February ([here](#)) [Accessed 29-02-2016]

<sup>35</sup> Note that the decision to potentially increase the number of student places in the Allied Health Professions by 10,000 is based on the assumption that ‘demand exceeds supply’ in terms of numbers who apply for such courses but do not secure a place. However, there is no information in relation to the quality of the applicants. Specifically, there is no information available on the proportion of potential applicants who are not suitable. As such, even under the current Health Education England commissioning process, there may not be sufficient demand amongst **qualified** individuals to meet this increased supply without quality standards being compromised in some way.

<sup>36</sup> Institute for Fiscal Studies (2010), *The impact of the “2006-07 package” of reforms to HE funding*, 19<sup>th</sup> January 2010 ([here](#)) [Accessed 29-02-2016]

Based on previous analyses, the elasticity of demand for higher education stands at **-0.087** (London Economics (2011)<sup>37</sup>), which means that following an **71%** increase in the cost of higher education, there would be a **6.2%** expected decline in demand.

### **Aggregate resource flows**

Moving from the impact at individual level, in the next section we provide an assessment of the aggregate impact of the proposed changes on Higher Education Institutions, HM Treasury, as well as the reduced number of students/graduates continuing to participate in higher education. We illustrate the aggregate effect of the changes in fees and funding arrangements under a number of different scenarios – namely under the assumption that qualified professionals in nursing have earnings that are a) representative of the entire graduate population, and b) representative of the earnings of healthcare professionals more specifically.

In addition, we also provide an indication of the impact of the policies on the potential composition of the substantive workforce and subsequent reliance on Agency staff in the face of commissioning shortfalls, as well as the viability of continued provision amongst higher education providers.

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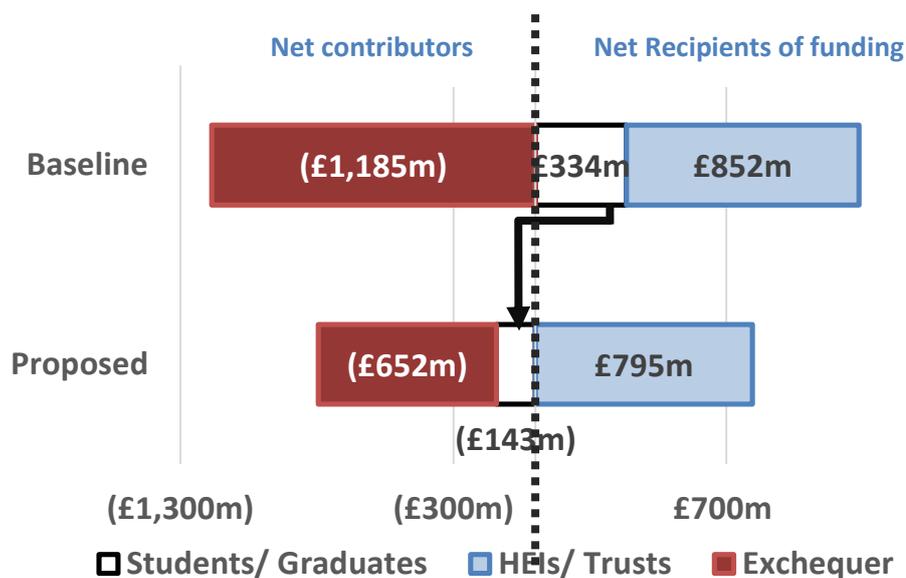
<sup>37</sup> Department for Business, Innovation and Skills All Select Committee (2011), *The Future of Higher Education – Written Submission from London Economics* (2010-11 session) ([here](#)) [Accessed 29-02-2016]

### 3 What will be the impact of the proposed changes?

#### Exchequer

Under the current system of fees and funding, the Exchequer contributes approximately **£1.185 billion** to the funding of a cohort of students in nursing professions (see Figure 3 and Table 2). Of this contribution, approximately **£852 million** is received by Higher Education Institutions (and/or Trusts) through Health Education England funding (**£687 million**) and Clinical Placement Tariffs (**£165 million**). The remaining **£334 million** is allocated to students (predominantly through means-tested and non-means tested maintenance grants (**£234 million**)), maintenance loans (**£36 million**), and salary support (**£64 million**).

**Figure 3** Change in contributions from different stakeholders under 2015 CSR proposals



*London Economics' analysis*

Looking in greater detail at Exchequer resource flows, the headline analysis suggest that, overall, the Exchequer saves approximately **£537 million** per cohort for the proposed changes contained in the 2015 CSR.

Specifically, in terms of cost savings, the Exchequer saves approximately **£234 million** as a result of no longer paying any maintenance grants. Approximately **£71 million** of this relates to the non-means tested maintenance grant currently awarded to full-time students, with a further **£135 million** related to means-tested grants (with the corresponding estimates for part-time students standing at **£8 million** and **£26 million** respectively).

The Exchequer 'saves' a further **£687 million** in funding allocated through Health Education England (**£613 million** associated with full-time students and **£74 million** associated with part-time students). However, a significant proportion of this cost saving is now incurred in the form of interest rate subsidies and expected write-offs of the tuition fee loans that have replaced the NHS fee bursary. The cost of the RAB charge associated with full-time student tuition fees stands at **£248**

### 3 | What will be the impact of the proposed changes?

**million** (representing a RAB charge of **43.5%**)<sup>38</sup>. Furthermore, in relation to the new increased means-tested maintenance loan, the RAB charge costs associated with this student support element was estimated to be **£210 million** (an increase of **£169 million**).

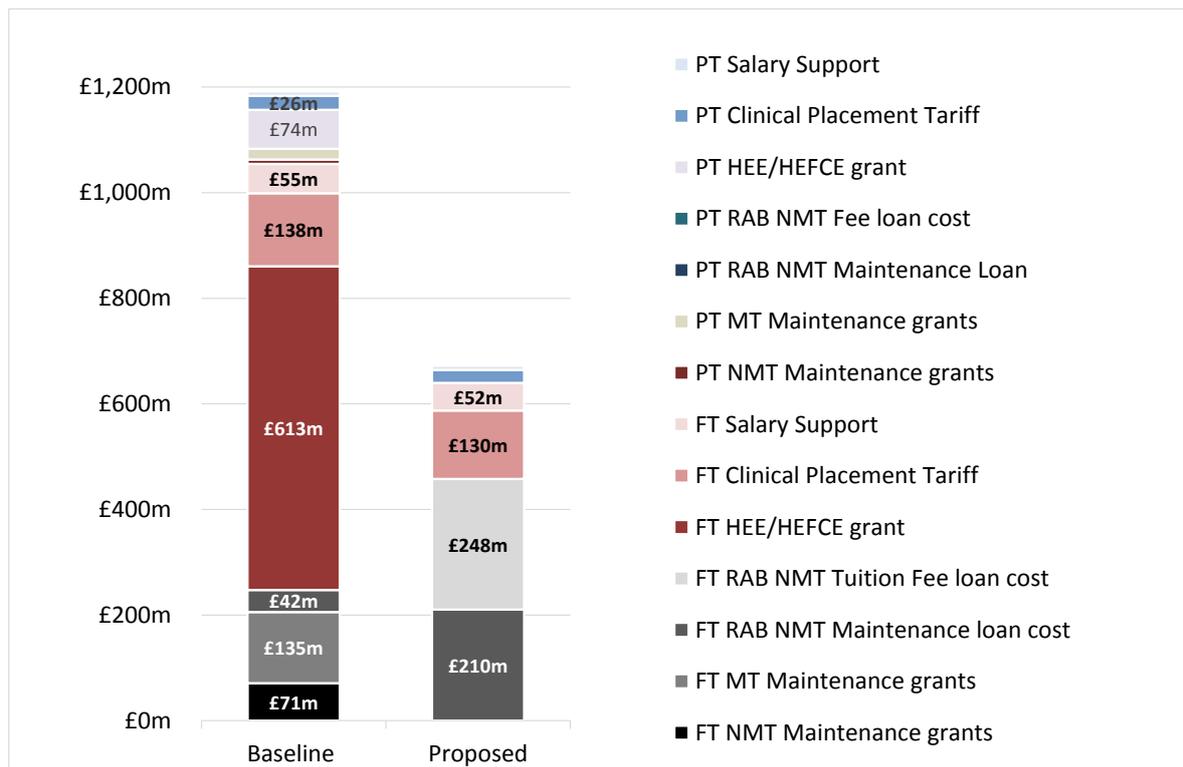
In aggregate, the 'simple' headline analysis suggests that the Exchequer saves approximately **£415 million** per cohort in relation to full-time students and **£119 million** in relation to part-time students.

**Table 2 Comparison of student finance arrangements in subjects allied to medicine following 2015 CSR – impact on the Exchequer**

	Nurses, midwives and allied health subjects		
	2015-16	2017-18	Change
<b>Full time students</b>			
Number of students	26,180	24,554	(1,626)
NMT Maintenance grants	£71m	£0m	(£71m)
MT Maintenance grants	£135m	£0m	(£135m)
FT RAB NMT Maintenance loan cost	£42m	£210m	£169m
FT RAB NMT Tuition Fee loan cost	£0m	£248m	£248m
FT HEE/HEFCE grant	£613m	£0m	(£613m)
FT Clinical Placement Tariff	£138m	£130m	(£9m)
FT Salary Support	£55m	£52m	(£3m)
<b>Sub-total (full time students)</b>	<b>£1,054m</b>	<b>£640m</b>	<b>(£415m)</b>
<b>Part time students</b>			
Number of students	5,145	4,825	(320)
NMT Maintenance grants	£8m	£0m	(£8m)
MT Maintenance grants	£20m	£0m	(£20m)
RAB NMT Maintenance Loan	(£6m)	£0m	£6m
RAB NMT Fee loan cost	£0m	(£20m)	(£20m)
HEE/HEFCE grant	£74m	£0m	(£74m)
Clinical Placement Tariff	£26m	£25m	(£2m)
Salary Support	£8m	£8m	(£1m)
<b>Sub-total (part time students)</b>	<b>£131m</b>	<b>£12m</b>	<b>(£119m)</b>
<b>Total</b>	<b>£1,185m</b>	<b>£652m</b>	<b>(£534m)</b>

Note: MT – Means tested; NMT – Non means tested; LAH - Living at Home; LAFHOL - Living away from home outside of London; LAFHIL - Living away from home inside London. Differences in totals are due to rounding. Values in brackets represent cost-savings to the Exchequer. **Source: London Economics' analysis**

<sup>38</sup> Note that in relation to the RAB charge for part-time students, given their higher average earnings, and the fact that they are more likely to combine work with study, London Economics modelling has always estimated a lower estimate of the RAB charge compare to official estimates. Specifically, under the baseline scenario, we estimated that the RAB charge for part-time students stands at **-25%** meaning that HM Treasury achieves a positive return on the loans distributed to part-time students. In relation to the official estimates of the RAB charge, the Department for Business, Innovation and Skills estimates that the part-time RAB charge stands at approximately **20%** - marginally below the full-time equivalent. If we were to assume the official BIS estimate, the costs to the Exchequer under the baseline scenario would be **£12 million** higher.

**Figure 4** Change in contributions from different stakeholders under 2015 CSR proposals

London Economics' analysis

### Higher Education Institutions/ Trusts

Following the fundamental changes in the approach to funding nursing professions, the analysis (presented in Figure 3) suggests that the total resources that will be received by Higher Education Institutions will decline by approximately **£57 million** per cohort. The majority of this decline will be as a result of the decline in student numbers following the **71%** increase in effective costs. However, there will also be a reduction in HEI revenues as a result of the fact that the proportion of the tuition fee received by HEIs will now be 'handed back' to students given the access agreements that HEIs sign with the Office for Fair Access.

In relation to the breakdown of resources, the analysis indicates that Higher Education Institutions will become almost exclusively reliant on tuition fee income from students. Specifically, under the new proposals, HEIs will receive **£670 million** in funding from full-time and part-time students in tuition fee income – but will be required to hand back approximately **£30 million** in Access Bursaries<sup>39</sup>, leaving a net tuition income of **£640 million**.

This **£640 million** in tuition fee income only partially replaces the **£687 million** in lost funding from Health Education England. On top of this reduction in income, the funding (received by Trusts) for the Clinical Placement Tariff declines from **£165 million** to **£154 million** as a result in the **6.2%** decline in the number of students.

<sup>39</sup> As per footnote 12, this is an underestimate of the potential resource implications of Access Bursaries for Higher Education Institutions. In reality, the actual costs of additional widening participation and retention activities would be approximately £20 million per cohort greater (i.e. implying that the total financial commitment of HEIs in relation to Access Bursaries might be closer to £50 million rather than the £30 million presented here).

**Table 3 Comparison of student finance arrangements in subjects allied to medicine following 2015 CSR – impact on Higher Education Institutions**

	Nurses, midwives and allied health subjects		
	2015-16	2017-18	Change
<b>Full time students</b>			
Number of students	26,180	24,554	(1,626)
Full time Gross fee income	£0m	£599m	£599m
Access Bursaries	£0m	(£30m)	(£30m)
FT HEFCE grant/ HEE Funding	£613m	(£0)	(£613m)
Clinical Placement Tariff (FT)	£138m	£130m	(£9m)
<b>Sub-total</b>	<b>£751m</b>	<b>£699m</b>	<b>(£53m)</b>
<b>Part time students</b>			
Number of students	5,145	4,825	(320)
PT net fee income	£0m	£72m	£72m
PT HEFCE grant/ HEE Funding	£74m	£0m	(£74m)
Clinical Placement Tariff (PT)	£26m	£25m	(£2m)
<b>Sub-total</b>	<b>£100m</b>	<b>£96m</b>	<b>(£4m)</b>
<b>Total</b>	<b>£851m</b>	<b>£795m</b>	<b>(£57m)</b>

Note: MT – Means-tested; NMT – Non-means tested; LAH - Living at Home; LAFHOL - Living away from home outside of London; LAFHIL - Living away from home inside London. Differences in totals are due to rounding.

Source: London Economics' analysis

In addition to the decline in funding, there may be additional consequences on Higher Education Institutions. In particular, Health Education England plays an important role in *balancing* the demand for higher education in Allied Health Professions with the current supply of HEI places (both by institution and by subject discipline). With the removal of this balancing role from HEE, and the fact that the entire resources of the fees and funding system will be fully portable, means that there could be significantly greater volatility and uncertainty associated with HEI future funding flows.

Furthermore, by removing the system-wide student cap – and potentially the student cap for individual Higher Education Institutions – in stark contrast to the activities of Health Education England - actually increases the potential volatility and uncertainty on the supply side.

Although there is only very limited evidence in relation to the capacity of Higher Education Institutions to viably supply training in the Allied Health Professions, we believe the reduction in the expected demand for health professional training, as well as the reduced funding per capita, will negatively impact the supply of HEI provided training. Specifically, we believe that there are Higher Education Institutions that are currently on the cusp of viability in health related disciplines – and who already implicitly cross-subsidise health related training through lower cost subjects (i.e. humanities and social sciences). Further erosion of volume and unit of resource may result in irreversible declines in future supply as HEIs take the view that continued provision is unsustainable.

### Students/graduates

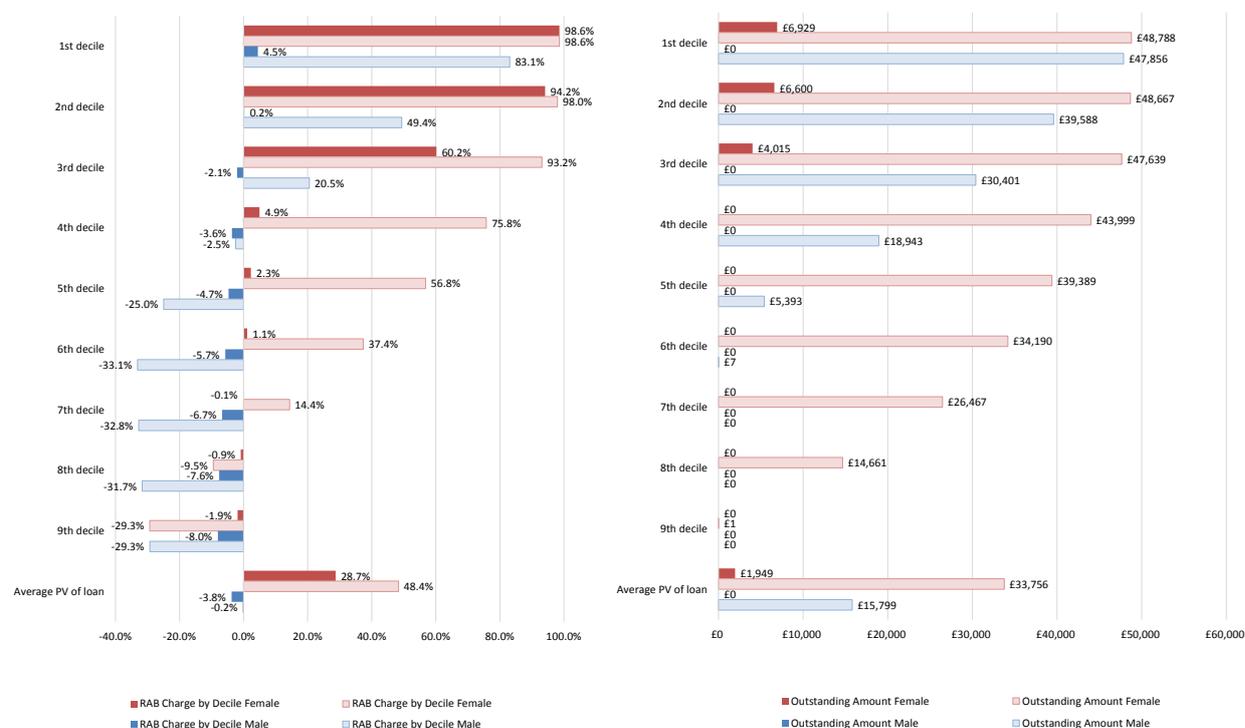
In aggregate, instead of being net beneficiaries of public funding (by **£334 million**), the analysis suggests that student/graduates in nursing professions will now contribute **£143 million** to fund their studies. Predominantly, this increase in contribution is made up by the **£670 million** net tuition fee income provided to Higher Education Institutions offset against **£537 million** received in the form of tuition fee loan write offs (**£227 million**), maintenance loan write offs (**£210 million**), and salary support (**£60 million**).

### Disaggregated analysis

From the student perspective, in addition to the aggregate analysis of the average change in the RAB charge, it is also important to understand the different effect depending on post-graduation earnings. Specifically, in the panel to the left of Figure 5, the analysis suggests that amongst *women*, the RAB charge ranges from **98.6%** for women in the lowest earnings decile post-graduation to **minus 1.9%** for the top earning graduates (with the average RAB charge standing at **28.7%**)<sup>40</sup>. In relation to the level of debt that is expected to be written off by the Exchequer 30 years post-graduation, for women in the bottom earnings cohort, the write-off stands at **£6,930**, with women in the 4<sup>th</sup> decile and above paying off their entire student debt (plus interest). The average debt on reaching the 30 year end of loan repayments stands at **£1,949** for women and **zero** for men.

However, under the proposed changes to the fees and funding regime facing student in the Allied Health Professions, the average RAB charge amongst women increases to approximately **48.4%**<sup>41</sup>, with the average level of debt written off 30 years post-graduation standing at approximately **£33,756**. Furthermore, unlike the baseline scenario, only women in the top earning decile will pay off their entire loan balance.

**Figure 5 RAB charge and debt outstanding on write off under baseline system and proposed amendments**



### London Economics' analysis

<sup>40</sup> Note that we have assumed that **10%** of students in nursing professions are male. As a result, over the entire cohort of students /graduates, the average RAB charge under current fees and funding arrangements stands at **25.5%**.

<sup>41</sup> **43.5%** across the entire cohort

### 3.1 Adjusting for realistic post-graduation earnings

The analysis presented so far assumes that the earnings achieved by students in the nursing professions are representative of the graduate cohort as a whole, and it is this assumption that drives the estimate of the RAB charge (43.5% for the cohort overall). However, it is clear from wider academic research (Department for Business, Innovation and Skills (2011)<sup>42</sup>) that the returns achieved by students/graduates in these subject areas are lower than those achieved more generally – both in relation to potential starting salaries, but also less likely to grow rapidly, given the heavily centralised pay setting within the Allied Health Professions.

In particular, given the slightly older age of students undertaking Allied Health Profession degrees, the starting salary associated with a **newly qualified nurse** stands at **£21,692** excluding any area cost adjustment (comparable to the bottom of Band 5)<sup>43 44</sup>. This corresponds to the 3<sup>rd</sup> decile of earnings, with an associated RAB charge for women of **93.2%** (and **20.5%** for men), corresponding to a weighted average of **85.9%** overall. Even if we assume that earnings are marginally greater than this over the working life, the RAB charge associated with the 4<sup>th</sup> decile of earnings stands at **75.8%** for women (**-2.5%** for men) and a weighted average of **68.0%** overall<sup>45</sup>. Table 4 illustrates the costs to the Exchequer under these more realistic assumptions relating to the RAB charge.

**Table 4 Comparison of student finance arrangements in nursing subjects following 2015 CSR – impact on the Exchequer**

	2015-16 25.5% RAB	2017-18 43.5% RAB	2017-18 48.6% RAB	2017-18 68.0% RAB	2017-18 85.9% RAB
<b>Full time students</b>	Baseline	Current model	Median earnings	4 <sup>th</sup> decile earnings	3 <sup>rd</sup> decile earnings
Number of students	26,180	24,554	24,554	24,554	24,554
NMT Maintenance grants	£71m	£0m	£0m	£0m	£0m
MT Maintenance grants	£135m	£0m	£0m	£0m	£0m
FT RAB NMT Maintenance loan cost	£42m	£210m	£235m	£329m	£415m
FT RAB NMT Tuition Fee loan cost	£0m	£248m	£276m	£387m	£489m
FT HEE/HEFCE grant	£613m	£0m	£0m	£0m	£0m
FT Clinical Placement Tariff	£138m	£130m	£130m	£130m	£130m
FT Salary Support	£55m	£52m	£52m	£52m	£52m
<b>Sub-total (full time students)</b>	<b>£1,054m</b>	<b>£640m</b>	<b>£693m</b>	<b>£897m</b>	<b>£1,085m</b>
<b>Part time students</b>					
Number of students	5,145	4,825	4,825	4,825	4,825
NMT Maintenance grants	£8m	£0m	£0m	£0m	£0m
MT Maintenance grants	£20m	£0m	£0m	£0m	£0m
RAB NMT Maintenance Loan	(£6m)	£0m	£0m	£0m	£0m
RAB NMT Fee loan cost	£0m	(£20m)	(£20m)	(£20m)	(£20m)
HEE/HEFCE grant	£74m	£0m	£0m	£0m	£0m
Clinical Placement Tariff	£26m	£25m	£25m	£25m	£25m
Salary Support	£8m	£8m	£8m	£8m	£8m
<b>Sub-total (part time students)</b>	<b>£131m</b>	<b>£12m</b>	<b>£12m</b>	<b>£12m</b>	<b>£12m</b>
<b>Total</b>	<b>£1,185m</b>	<b>£652m</b>	<b>£705m</b>	<b>£909m</b>	<b>£1,096m</b>
<b>Change from Baseline</b>		<b>(£534m)</b>	<b>(£480m)</b>	<b>(£276m)</b>	<b>(£88m)</b>

Note: MT – Means-tested; NMT – Non-means tested; LAH – Living at Home; LAFHOL – Living away from home outside of London; LAFHIL – Living away from home inside London. **Source: London Economics' analysis**

<sup>42</sup> Department for Business, innovation and Skills, "The Returns to Higher Education Qualifications", BIS Research report 45, June 2011 ([here](#)) [Accessed 29-02-2016]

<sup>43</sup> See NHS Careers ([here](#)) [Accessed 23-02-2016]

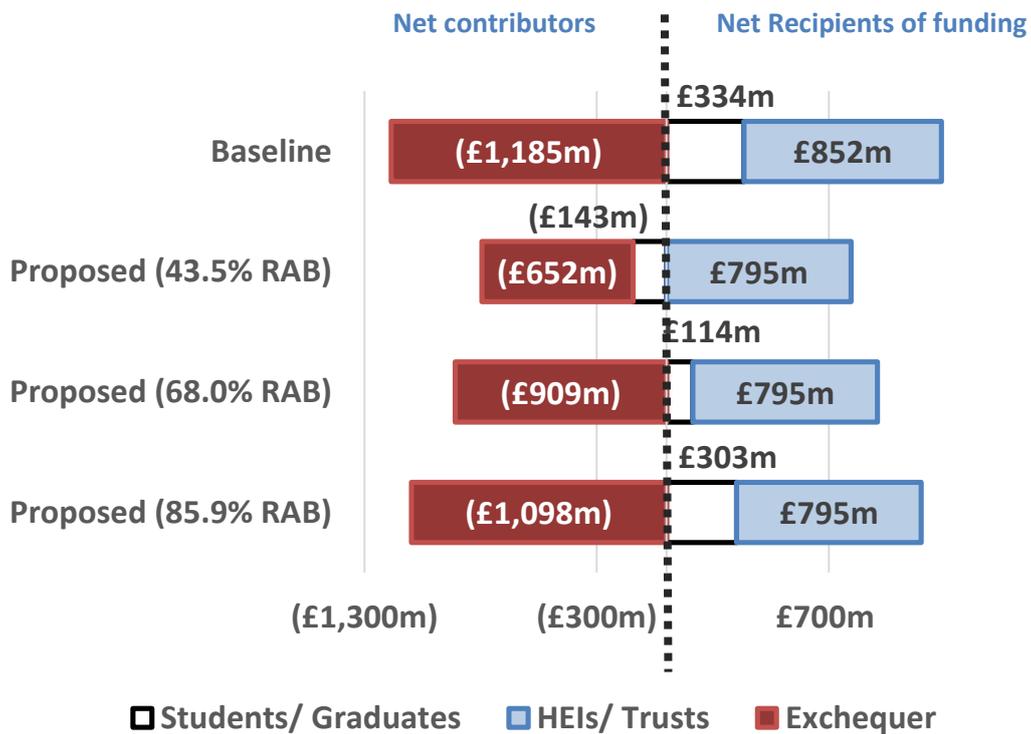
<sup>44</sup> Incorporating area cost adjustment, the starting salary is closer to **£22,776**

<sup>45</sup> Note, as per footnote 6, these average real earnings figures are comparable with those presented in the MAC report ([here](#))

In other words, given the fundamentally different characteristics of graduate earnings for students in nursing professions, as well as the higher the average of incidence of females employed in the profession (with the consequential effect on labour market participation), the potential ‘savings’ accrued by the Exchequer might be significantly lower than the headline estimates presented in Figure 2 and Table 4.

In particular, if we assume that graduate earnings are on the 3<sup>rd</sup> earnings decile, the actual savings might be closer to **£88 million** per cohort (of which the majority (**£73 million**) of this saving is associated with reduced student numbers and just **£15 million** – or less than 3% - associated with ‘real’ savings).

**Figure 6 RAB charge and debt outstanding on write-off under baseline system and proposed amendments**



London Economics' analysis

## 4 Other costs?

### Increased reliance on Agency Staff

In addition to achieving relatively limited direct savings, there are some important wider consequences that need to be considered. Specifically, if there is a decline in the number of students in Allied Health Professions participating in higher education, this means that in the medium term, there will be insufficient entrants to the National Health Service to compensate for that proportion of the substantive workforce that leave the profession every year. Specifically, the proportion of nurses leaving the profession increased from **6.8%** in 2009-10 to **9.2%** in 2014-15 (compared to **7.9%** and **9.0%** across all staff (including clinical staff)<sup>46</sup>. The same report suggests that in 2014, there was a **7.2%** shortfall in the nursing workforce (equating to almost **28,000** individuals). To fill these temporary shortfalls, there is an increasing reliance on Agency staffing. In particular, the recent NAO report suggests that:

*The demand for temporary staffing has increased. For example, the number of nursing hours [.....] doubled in three years (from around 650,000 in April 2012 to 1.3 million in April 2015). This suggests, across all trusts, requests for temporary staff were equivalent to around 30,000 full-time equivalent nurses (or 11% of total nursing hours) in 2014-15.*

This use of Agency staffing costs Trusts in the region of **£3.3bn** per annum – corresponding to **7%** of Trusts' entire wage bill<sup>47</sup>.

Taking the example of adult nursing, information from a variety of sources<sup>48</sup> suggests that the cost premium associated with Agency staffing is approximately **50%** more than directly employed NHS staff. If we assume that newly qualified nurses are employed at the bottom of Band 5 (Point 16) – and assuming that there is an average of a **5%** area cost adjustment<sup>49</sup> - this suggests that the average cost of employing Agency nurses is between approximately **£11,000** and **£17,000** per annum more than employing an Adult nurse directly (depending on the point on the salary band of the nurse being covered). Using the same assumption in relation to in-course attrition and drop-out, if we assume that **80%** of completers actually enter the NHS post qualification attainment, and that newly qualified staff have the same turnover rate as the existing pool of directly employed staff (**9.2%**), then this suggests that the **additional costs** incurred per full-time-equivalent nurse employed through an Agency is approximately **£62,000** in present value terms over a 10 year period (which we believe is a very conservative estimate).

Aggregating this estimate of the additional Agency cost per nurse by the expected decline in the numbers entering higher education in a particular cohort (**1,754** full-time students and **345** part-time students), this equates to an additional **£100.3 million** cost to Trusts per cohort. This implies that depending on the assumptions made in relation to post graduation earnings in Allied Health Professions (and the estimate of the RAB charge), the entire 'savings' that might be achieved through reduced commissioning costs might be eliminated almost completely<sup>50</sup>.

### Overseas recruitment

<sup>46</sup> National Audit Office (2016), *Managing the supply of NHS Clinical Staff in England*, February ([here](#)) [Accessed 29-02-2016]

<sup>47</sup> Note that spending on agency nurses increased by more than spending on bank nurses. In the two years to 2014-15, data from a sample of trusts suggests spending on agency nurses tripled (comprising a 178% increase in use and a 9% increase in the hourly rates charged by agencies). This compared with an 11% increase in spending on bank nurses.

<sup>48</sup> Liaison (2014), *Taking the temperature, The inaugural review of NHS agency staffing spending in 2013/14*, ([here](#)) [Accessed 29-02-2016]

<sup>49</sup> In relation to area cost adjustments, in Inner London, the area cost adjustment stands at 20% of basic salary, subject to a minimum payment of £4,117 and a maximum payment of £6,342. In outer London, the area cost adjustment stands at 15% of basic salary, subject to a minimum payment of £3,483 and a maximum payment of £4,439, while in Fringe areas, the area cost adjustment stands at 5% of basic salary, subject to a minimum payment of £951 and a maximum payment of £1,649.

<sup>50</sup> Importantly, this takes **no account** of the potential additional costs that might be incurred by HEIs or Trusts in relation to recruitment or retention (i.e. "golden hellos" or possible loan forgiveness during employment).

Alternatively, shortfalls in the supply of NHS nurses have been addressed through the use of overseas recruitment. Headcount data from the Nursing and Midwifery Council and the Health and Social Care Information Centre suggests that **14%** of nurses in the NHS are trained overseas<sup>51</sup>. Combined with the introduction of an annual limit for how much each NHS trust can spend on Agency nurses (as a percentage of total spending on nursing staff), some NHS trusts may face substantial difficulties to fill staffing shortfalls, which raises the concerns over patient safety.

Moreover, while there is no definitive cost associated with recruiting from overseas; the National Audit Office (2016)<sup>52</sup> estimates the cost of recruiting a single nurse from overseas to range from **£2,000** to **£12,000**, which will further erode any potential fiscal benefits that might arise from the proposed changes in the 2015 CSR.

### Patient safety

A further reduction in the supply of nurses will have costly repercussions for patient safety. With fewer newly qualified nurses, the existing health professionals will be expected to work longer hours and take on more patients in order to do more with less. This is likely to lead to an increase in the occurrence of ‘never events’ (i.e. serious incidents that are wholly preventable) - 306 of which occurred between 1st April 2014 and 31st March 2015<sup>53</sup>. More ‘never events’ will mean more legal claims made against the NHS for clinical negligence. Between 2009/10 to 2013/14, more than £1.1bn has been paid out for errors of this nature at just 20 NHS trusts<sup>54</sup>. Increased compensation costs will further erode any potential fiscal benefits that might arise from the proposed changes in the 2015 CSR.

### Closing beds

The scrapping of the NHS bursary will also have a negative impact on the capacity of health and social care services to meet demand. If nursing numbers are reduced, this will result in beds being closed in hospitals. In 2014, significant concerns regarding nursing shortages at Mid Yorkshire Hospitals NHS Trust led to the Care Quality Commission (CQC) closing six beds on a 46 bed acute respiratory care ward at Pinderfields Hospital. On some occasions there was a ratio of one nurse to 22 patients<sup>55</sup>. In January 2016, Southend University Hospital NHS Foundation Trust was forced into significant bed closures after inspectors raised concerns about staff ratios. The CQC had raised “concerns over the trust’s ability to maintain registered nursing staffing levels to the ratio as indicated in [the National Institute for Health and Care Excellence] guidance”. The Trust, which had 583 beds as of the third quarter of 2015-16, indicated that 18 substantive beds remained closed “until staffing levels improve sufficiently to allow them to be safely reopened”. In addition, 28 temporary escalation beds, which had been opened to provide extra capacity because demand had been rising, were closed during the second half of January and remained closed throughout February 2016<sup>56</sup>.

<sup>51</sup> Health and Social Care Information Centre (2015). Based on information extracted from ESR from the NMC registration number field ([here](#)) [Accessed 07-04-2016]

<sup>52</sup> National Audit Office (2016), *Managing the supply of NHS Clinical Staff in England*, February ([here](#)) [Accessed 29-02-2016]

<sup>53</sup> <https://www.england.nhs.uk/patientsafety/wp-content/uploads/sites/32/2016/01/provsnl-ne-data-2014-15.pdf>

<sup>54</sup> <http://www.telegraph.co.uk/news/health/news/11733719/Medical-blunders-cost-NHS-billions.html>

<sup>55</sup> <http://www.nursingtimes.net/news/hospital/mp-warns-of-nurse-shortages-at-yorkshire-trust/7003528.article>

<sup>56</sup> <http://www.nursingtimes.net/news/workforce/trust-shuts-beds-after-raising-of-nurse-ratio-concerns/7003469.fullarticle>

## 5 Conclusion

### What were the broad proposed changes in the 2015 CSR?

The 2015 Comprehensive Spending Review (HM Treasury (2015)<sup>57</sup>) contained a number of significant policy proposals in the education and skills arena, although potentially none as important as the proposals relating to the higher education fees and funding arrangements for nursing, midwifery, and allied health subjects. Our understanding of the fundamental changes are as follows:

- Students undertaking nursing, midwifery and allied health degrees from September 2017 will be moved on to the standard student support system. Essentially, all non-repayable mainstream NHS bursaries and additional allowances will be replaced with income-contingent loans<sup>58</sup>.
- Furthermore, students undertaking health related degrees will move from their higher education places being funded via the Health Education England commissioning process to a **variable fee-based tuition fee system backed by income-contingent loans**.

### What will be the impact of the proposed changes in the 2015 CSR?

As a result of these policy changes:

- **Students/graduates will be substantially worse off.** The **71%** increased costs that students and graduates will bear will result in the nursing professions being less attractive, and will in all likelihood reduce higher education participation by **6-7%** - equivalent to almost 2,000 students in the first year.
- **Higher Education Institutions will also be worse off** by approximately **£57-£77 million** per cohort. Higher Education Institutions will be hit by the reduction of student numbers, but also by the reduction in the unit of resource associated with these students as a result of Access Bursaries that will need to be financed. Furthermore, if fees and funding support is entirely portable, Higher Education Institutions' income streams are likely to be substantially more volatile in the future.
- **At first glance**, following the removal of grants and allowances, as well as making students/graduates bear a significant proportion of the tuition fee cost, **the Exchequer will be approximately £534 million per cohort better off**. However, this is based on the assumption that students in nursing professions achieve comparable post-graduation earnings as the wider graduate cohort.
- If the analysis is replicated – and we assume that the earnings of graduates in Allied Health Professions are comparable to fully qualified nurses, midwives and health professionals, then **the cost savings achieved by the Exchequer declines by anywhere between 50% and 85%** (to approximately **£88 million**).
- Given the acute shortages across the NHS workforce, any decline in the level of education commissioning is likely to lead to a significant increase in staff shortages in the medium term – and the subsequent dependency on Agency staff. The increased costs associated with this increased dependency could almost entirely wipe out any potential cost savings.

<sup>57</sup> HM Treasury (2015), *Spending Review and Autumn Statement*, 27 November 2015, Available [here](#) [Accessed 29-02-2016]

<sup>58</sup> Note that the move to loans will mean access to additional financial support for health students during their studies in absolute terms [2015 CSR {Paragraphs 1.100, 2.46 and 3.122}]

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