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Office of the President

TO MEMBERS OF THE COMPLIANCE AND AUDIT COMMITTEE:

DISCUSSION ITEM

For Meeting of September 13, 2017

UPDATE ON RISK SERVICES AND FIAT LUX CAPTIVE INSURANCE COMPANY

EXECUTIVE SUMMARY

The Office of Risk Services, part of the Chief Financial Officer Division within the Office of the President, provides insurance services and risk mitigation programs for the University of California system, serving as an insurance company. Each location – campuses, medical centers, Agriculture and Natural Resources, and the Office of the President – pays an actuarially-determined premium based on a combination of that location's individual loss experience and its experience and exposure base, which could include several factors such as FTE, fleet size, or number of hospital beds.

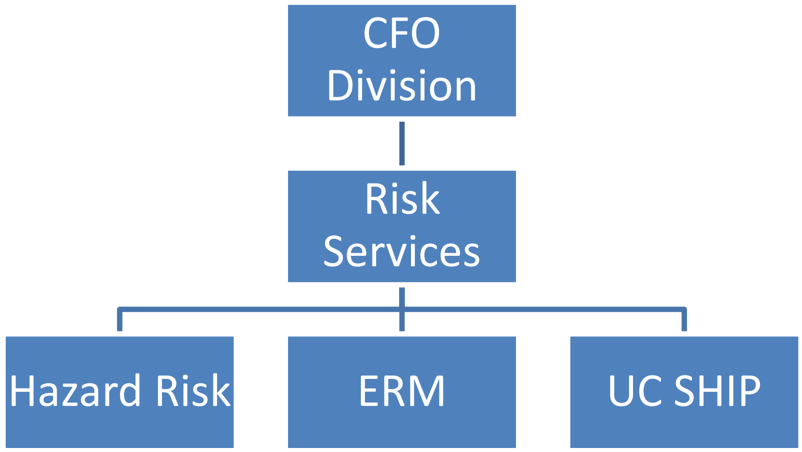
Fiat Lux Risk and Insurance Company is a wholly-owned, single-parent, not-for-profit captive insurance company established by the Regents of the University of California in 2012. As an incorporated and licensed insurance company, Fiat Lux provides the University a unique mechanism with which to finance UC's systemwide risks. It also allows UC the ability to capture underwriting profits and corresponding investment income that would normally be retained by traditional insurance companies by becoming a risk-bearing insurer itself.

Fiat Lux now purchases a majority of the insurance to cover the University's risks systemwide. Whereas in the past UC purchased this insurance on a retail basis through brokers, Fiat Lux purchases reinsurance directly from the markets (on a wholesale basis).This increases UC's capacity and reduces its expense.

Executive Vice President and Chief Financial Officer Brostrom, Associate Vice President and Chief Risk Officer Cheryl Lloyd, and Deputy Chief Risk Officer Kevin Confetti will provide an update on Fiat Lux's activities to date and future opportunities.

BACKGROUND

The insurance coverage and risk mitigation provided by Risk Services falls into three overall areas: hazard risk, enterprise risk management, and the UC Student Health Insurance Program.



Within these areas, Risk Services procures insurance and reinsurance for the ten campuses including the medical centers.

Insurance Coverage

Among the insurance coverages Risk Services procures are the following:

- Automobile liability
- Aviation
- Construction
- Crime
- Directors & Officers
- Employment practices liability
- Fiduciary
- General liability
- Hospital professional liability
- Marine
- Mortgage impairment
- Non-owned aircraft liability
- Parametric earthquake
- Pollution and environmental
- Property
- Registered student organization liability
- Sexual misconduct liability
- Technology, privacy and cyber liability
- Terrorism
- Travel and accident
- Unmanned aircraft liability
- Workers' compensation

Risk Mitigation

Risk Services provides loss mitigation and prevention funding related to UC's insurance coverages, including immediate funding for emerging unforeseen risks to bridge the gap in a crisis. For example, as colleges and universities across the U.S. began to grapple with the emerging risk of concussion-related injuries to athletes, Risk Services worked with the directors of club sports throughout the system to provide seed funding and develop protocols and best practices around this risk.

Additional examples of risk mitigation services provided by Risk Services through various programs include:

- Disability management specialists
- Driver safety training programs
- Emergency management and crisis response programs
- Environment, health and safety programs
- Laboratory safety initiatives, including personal protective equipment distribution
- Major event response services
- Web accessibility compliance

Financing

Since 2012 the University has funded its risk programs through its own captive insurance company, Fiat Lux, a unique mechanism that allows the University to capture underwriting profits and corresponding investment income. Fiat Lux purchases reinsurance directly from the markets on a wholesale basis.

Overview of Captive Insurance Companies

A captive insurance company is a wholly-owned insurance company that is licensed and regulated by an authorized domicile to insure the risks of affiliated entities. A captive also is a closely held insurance company whose insurance business is supplied and controlled by its owner, in this case, the UC Regents, who are also its principal beneficiary. While the captive insurance company is a separate legal entity subject to corporate formalities, its owner (e.g., UC Regents) has direct involvement in and influence over the captive's major operations, including underwriting, claims management, policy form, and investments.

There are more than 5,000 captive insurance companies domiciled throughout the world today and between 40 percent and 50 percent of major U.S. corporations utilize them, including many major university-affiliated health systems. Over 1,000 higher education institutions own or participate in captive insurance structures in the United States alone. Prominent among these universities and colleges are the University of Minnesota, Yale, Stanford, Duke, Northwestern, Pennsylvania State University, the University of Michigan, Rutgers, Cornell, and Columbia.

A captive insurance company can yield the following benefits:

- As a self-insurance vehicle, the captive is not subject to the wide swings of commercial insurance pricing and therefore use of a captive can improve cost stability and predictability.
- Captive insurance companies are held to rigorous external accounting and auditing standards, which compel formalized risk financing policy and practice.
- Because it is a licensed insurance company, a captive insurance company can directly access the reinsurance markets. In essence, it allows UC to purchase excess insurance (reinsurance) on a wholesale basis as opposed to retail. This can increase the number of reinsurance companies available to compete for UC business.
- A captive insurance company can facilitate the provision of insurance to non-UC organizations (third parties such as affiliated physicians or joint ventures).

UC's captive, Fiat Lux, also has the ability and authority to create additional captives. The Board of Directors of Fiat Lux Risk and Insurance Company, in conjunction with the President and the General Counsel, decided to pursue the formation of a second captive insurance company focused on the medical malpractice risks of non-employed physicians in the form of a Reciprocal Risk Retention Group.

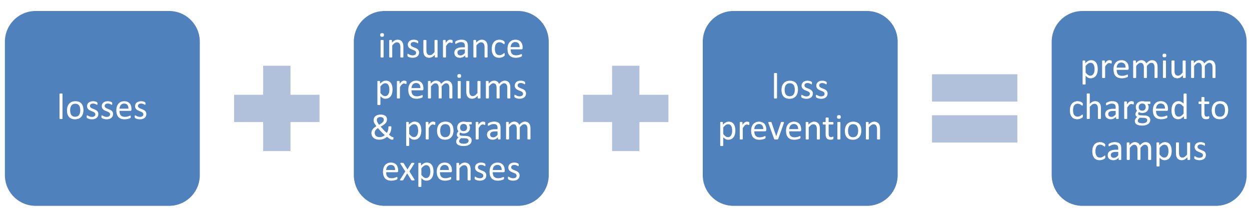
Fiat Lux Risk and Insurance Company

Beginning in 2012 and continuing through the 2015 policy year, Fiat Lux insured six types of risk for the UC system, with $25 million of written premium and $60 million of assets.

As of the 2016 policy year, Fiat Lux now insures or reinsures 23 types of risk for the UC system. Through a loss portfolio transfer, Fiat Lux grew to over with $900 million of written premium and $1.1 billion of assets. The company has approximately $700 million in liabilities. A dedicated investment pool was created to invest the assets.

Risk Services Funding Model

The Risk Services unit's budget is entirely funded by recharges from these insurance programs. It is not funded by the systemwide assessment or other unrestricted fund sources at the Office of the President. This recharge pays for insurance, reinsurance, loss prevention, and loss mitigation programs that Risk Services operates.



Specific Lines of Coverage

In response to questions previously asked by the Regents, the next section will delve into three lines of coverage in which claims are most often seen: hospital professional medical malpractice, employment practices, and workers' compensation, and will provide an introduction to two newer lines of coverage for earthquakes and the emerging risks of cyber security.

Hospital Professional Medical Malpractice

Total payments by fiscal year:

	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Indemnity	$37,827,969	$40,861,543	$24,949,371	$36,644,971	$37,832,918
Costs	$2,513,371	$2,129,531	$2,027,809	$2,834,598	$2,977,937
Legal fees	$8,059,662	$6,904,281	$8,061,982	$11,198,278	$11,524,345
Experts	$2,473,792	$2,210,828	$2,236,451	$3,191,291	$3,261,858
FY total	**$47,874,794**	**$52,106,182**	**$37,275,613**	**$53,869,138**	**$55,597,057**

How campuses are charged:

The University's actuary develops Hospital Professional Liability premium rates for locations based on a two-step process:

First, funding targets are established for the Hospital Professional Liability program in total, including medical centers and schools of medicine together. These targets are based on over 20 years of exposures and loss experience. The exposures are calculated from a variety of factors, including the number of hospital beds, patients, and physicians (by type of practice).

Second, the total Hospital Professional Liability funding amounts are allocated to individual locations. This is based on the most recent five years of exposures as well as reported losses limited to $1 million per occurrence.

Since the University's Hospital Professional Liability program is pooled, large losses are capped at $1 million with the remainder being spread across the pool and the portion of the costs for claims in excess of $1 million allocated to the individual facilities based on their proportion of total exposures. This prevents one location from being overly penalized from a catastrophic event.

Efforts to mitigate risk:

The Hospital Professional Liability program supports loss prevention and patient safety through a variety of initiatives, including:

- Hosting the systemwide Risk Mitigation Collaborative three times a year, to encourage systemwide sharing of lessons learned and best practices between the medical centers, with participants including medical center risk personnel, Risk Services, and the Office of the General Counsel;
- Providing premium rebates for specific medical center projects designed to reduce the frequency and/or severity of loss; and
- Providing the medical centers with a healthcare incident management system, allowing the medical centers to better report incidents and capture patient complaints, leading to improved patient safety and satisfaction.

Employment Practices Liability

Total payments by fiscal year:

	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Indemnity	$3,116,425	$6,630,838	$10,182,339	$5,778,110	$5,366,023
Costs	$777,646	$1,094,678	$1,542,657	$1,201,867	$1,299,891
Legal fees	$5,469,181	$8,657,222	$9,507,075	$8,469,356	$9,496,945
Experts	$84,397	$205,502	$117,035	$294,444	$197,673
FY total	**$9,447,650**	**$16,588,239**	**$21,349,107**	**$15,743,777**	**$16,360,533**

How campuses are charged:

The University's actuary develops Employment Practices Liability premium rates for locations based on a two-step process:

First, separate funding targets are established for the campuses in total and for medical centers in total. The total campus rate is based on over 20 years of campus exposures (FTE) and loss experience. Total medical center rates are based on medical center experience over a similar time period.

Second, the campus and medical center funding amounts are allocated to individual locations. This is based on the most recent five years of exposures as well as reported losses limited to $250,000 per occurrence. This loss cap prevents one location from being overly penalized from a catastrophic event.

Based on the size of each location, the allocations also take into account the credibility of each location's experience. The allocations also have a stabilizing mechanism to keep any one location's rates from fluctuating too much from one year to the next.

Efforts to mitigate risk:

The Employment Practices Liability program supports loss prevention and patient safety through a variety of initiatives. Among them:

- Developing and presenting quarterly training via the systemwide Employment Practices Improvement Committee (EPIC);
- Providing annual funding through the Be Smart About Safety program of approximately $1.5 million for locations to fund local prevention and mitigation programs;
- Providing annual funding for one Disability Management/Return to Work Coordinator position at each location;
- Producing an online scenario-based Disability Management Resource Video training/resource for supervisors and managers;
- Using an Office of the General Counsel monitor to attempt resolution prior to litigation; and

- Deploying an "Issues Resolution Resource" consultant to locations to resolve departmental issues.

Workers' Compensation

Total payments by fiscal year:

	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Medical	$30,680,562	$31,160,170	$32,101,387	$32,778,417	$30,315,531
Indemnity	$28,488,287	$28,114,926	$28,035,490	$30,348,029	$36,648,724
Expenses	$9,936,047	$15,646,392	$15,639,756	$15,482,354	$17,070,729
FY total	**$69,104,897**	**$74,921,488**	**$75,776,633**	**$78,608,800**	**$84,034,987**

How campuses are charged:

The University's actuary develops Workers' Compensation rates for locations based on a two-step process to determine a rate per every $100 of payroll.

First, funding targets are established for the UC workers' compensation program in total, including campuses, medical centers, and the Lawrence Berkeley National Laboratory. This is based on over 20 years of payroll exposure and loss experience.

Second, the total workers' compensation funding amounts are allocated to the individual locations. This is based on the most recent five years of payroll and loss experience as well as reported losses limited to $175,000 per occurrence.

Since the University's workers' compensation program is pooled, large losses are capped at $175,000 with the remainder being spread across the pool and the portion of the costs for claims in excess of $175,000 allocated to the individual locations based on their proportion of total payroll and ultimate claims costs. This prevents one location from being overly penalized from a catastrophic event.

Efforts to mitigate risk:

The Workers' Compensation program supports loss prevention through a range of initiatives, including:

- Providing annual funding of roughly $1.5 million through the Be Smart About Safety program to enable locations to fund local prevention and mitigation programs;
- Providing annual funding for one Disability Management/Return to Work Coordinator position at each location;
- Providing slip-resistant footwear to approximately 15,000 employees in high-risk occupations; and

- Providing best-in-class post-loss mitigation programs, including claims administration, managed care, data analytics, pharmacy network, physical medicine network, and catastrophic case management.

Cyber Risk

Risk Services has purchased Cyber Risk Insurance for the University since 2010. UC presents a complex risk exposure to the insurance marketplace. The first attempts to purchase insurance presented challenges and UC had to adopt a "reverse underwriting" approach which required certain conditions to be present in order to obtain coverage. Many of those conditions were difficult to meet. Risk Services continued to work with the London insurance marketplace to get them comfortable with the University's risk profile. Over the years the University was gradually able to increase the limits of coverage up to the current level of $100 million. And, this last year UC was able to renew without conditions precedent. The policy covers the following exposures:

- Security & Privacy Liability
- Security Breach Response
- Privacy Regulatory Claims
- Cyber Extortion
- Multimedia Liability
- Digital Asset

Earthquake

Until recently, UC did not purchase insurance for earthquake risk because options were not economically feasible. The Office of Risk Services used to monitor the insurance market for opportunities to acquire earthquake insurance.

Traditional earthquake insurance has high costs and large deductibles. Insurers require determination of actual loss in order to pay claims. While alternative risk financing tools exist, such as contingent capital models, capital markets, and collateralized reinsurance, these are emerging products with high costs.

Parametric insurance is an insurance product that is linked to capital market investments. Payment of claims is based upon a parametric trigger or event, for example "Earthquake measuring 7.0 or greater on the Richter scale".

UC purchased a parametric policy with a $50 million aggregate limit for the UC system and utilizing a shake intensity scale (the Modified Mercalli Intensity Scale) as opposed to the Richter Magnitude Scale. While the $50 million aggregate limit is a small amount for a system of UC's size, this is not meant to be traditional property building insurance coverage. Instead, it provides prompt budgetary support and can be used for post-event emergency response and recovery costs, not just building repairs.